

US-09-602-362E-15 (1-2030) x US-09-620-405B-475 (1-1002)

QY 9 GTTAAAGATGCTTCTTGAAGGCTAACTGCGGAATGAAAGTTTCTATTCTCAACTAAGCC 68
Db |||||
327 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 346
QY 69 TTAGAATTGATGACATGCAAACTTTCAAAGCAGAGCCCTCCGAGAGCAATCTGCGCTTC 128
Db |||||
347 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGlnLysProSerAlaPhe 366
QY 129 GAGCTGCCATTGAATGCAAAAGTCTGTCCTCAATAAAGCCTTGAATGAAGATGA 188
Db |||||
367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAAACATTGAGACAGATGATGATCTCCCATCAGAATCCAAACAAAGGACTATGAAGAA 248
Db |||||
387 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTyrGluGlu 406
QY 249 AGTTCTTGGGATCTGAGACTCTCTGTGAGACTGTTTCACAGAGGATGTGTTTACCC 308
Db |||||
407 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGCTACACATCAAAAGAAATAGATAAAATAAATGCAAAATTAGAAGAGTCTCCTGAT 368
Db |||||
427 LysAla***HisGlnLysGluIleAspLysIleAsnGlyLysLeuGluGluSerProAsp 446
QY 369 AATGATGTTTCTGAAGGCTCCCTGAGAAATGAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db |||||
447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466
QY 429 GAATTGATGACATGCAAACTTTCAAAGCAGAGCCCTCCGAGAGGCACTGCGCTTCGAG 488
Db |||||
467 GluLeuMetAspMetGlnThrPheLysAlaGluProGlnLysProSerAlaPheGlu 486
QY 489 CTTGCCATTGAAATGCAAAAGTCTGTTCCAAATAAAGCCTTGAATGAAGATGAACAA 548
Db |||||
487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGACAGATCAGATGTTCCCTTCAGATCAAAACAAAGAGGTTGAAGAAAT 608
Db |||||
507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 526
QY 609 TCTTGGGATTCTGAGACTCTCCGTGAGACTGTTTCACAGAGGATGTGTGTACCCCAAG 668
Db |||||
527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GCTACACATCAAAAGAAATGGAATAAATAGTGGAAATTAGAAGATTCACACTACCTTA 728
Db |||||
547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAAAATCTTGGATACAGTTCTTCTGTGAAGAGCAGGCAATTCAAAAGATCAC 788
Db |||||
567 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACAACGTACAGAAATAATGGAACAAATGAAATAAAGAGTTTGTGTACTGAAAAG 848
Db |||||
587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 606
QY 849 AAATGTCAGAGCAAAAGAAATAAATACAGTTAGAGACCAAAAGTTTAATCGGAA 908
Db |||||
607 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGlnLysValLysValLysTrpGlu 626
QY 909 CAAGAGCTCTCAGTGTGAGATTGACTTTTAAACCAAGAGAGAGAGAGAAATGCC 968
Db |||||
627 GlnGluLeuCysSerValArgLeuThrLeuAsnGlnGluGluGlnLysArgAsnAla 646
QY 969 GATATATTAATGAAATAATAGGAGAAATTAGGAATTCAGAGAGCAGCATAGCAA 1028
Db |||||
647 AspIleLeuAsnGluLysIleArgGluGluLeuGlyArgIleGluGlnHisArgLys 666
QY 1029 GAGTTAGAGTGAACCAACTTGAAACAGGCTCTCAGAAATACAGATATAGAAATGAAG 1088
Db |||||
667 GluLeuGluValLysGlnGlnLeuGlnAlaLeuArgIleGlnAspIleGluLeuLys 686

QY 1089 AGTCTAGAAAAGTAATTGAATCAGGTTTCTCAGACTCATGAAATAAATGAAATTTCTCTTA 1148
Db 687 SerValGluSerAsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeu 706
QY 1149 CATGAAATTCGATGTTGAAAAGGAAATGCCATGCTAAACTGGAATAATGACCACTG 1208
Db 707 HisGluAsnCysMetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeu 726
QY 1209 AAACACCAATACCAAGGAAAAGGAAAATAAATACTTTTCTGAGCAGATTAAGATTTTAAAGAA 1268
Db 727 LysHisGlnTyrGlnGlnLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGlu 746
QY 1269 AAGAAATGCTGAATTCAGATGAGCCCTAAACTGAAAGAGGAATCATTAATAAAGGCA 1328
Db 747 LysAsnAlaGluLeuGlnMetThrLeuLysLeuLysGluSerLeuThrLysArgAla 766
QY 1329 TCTCAATATAGTGGCAGCTTAAAGTTTCTGATAGCTGAGAACACAATGCTCCTCTCTAAA 1388
Db 767 SerGlnTyrSerGlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLys 786
QY 1389 TTGAAGGAAAACAAAGCAAAAGAAATCTAGAGCAGCAAAATGGAATCACACCATCTCTAGA 1448
Db 787 LeuLysGlnLysGlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArg 806
QY 1449 CTGCTTCTGCTGTACAGACCATGATCAAAATGTGACATCAAGAAAAGTCAAGAACCT 1508
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QY 1509 GCTTTCACATTCAGGAGATGCTTGTTCAAAGAAAATGAATGTTGATGTGAGTAGT 1568
Db 827 AlaPheHisIleAlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSer 846
QY 1569 ACCGATATTAACATGAGTGTCTCCATCAACCACTTCTGAGCTCAAGAAAAGTCAAGAACCT 1628
Db 847 ThrIleTyrAsnAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLys 866
QY 1629 AAGCTTAAATTAATCTCAATTTAGCAGGAGATGCTCTAAGAGAAAATACATTGGTTTC 1688
Db 866 sSerLeuLysIleAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer 886
QY 1689 AGGAACATGCAAAAGAGACCAACCTGAAACACAGTGTCAATGAAGAGAGCTCAACACA 1748
Db 886 r-GluHisAlaGlnArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHis 906
QY 1749 TGTNTCAAACGAAACAGATNATGTGAACAAACACACTGANCAGCAGAGTCTCTAGATC 1808
Db 906 etTyrGlnAsnGluGlnAspAsnValAsnLysHisThrGluGlnGlnLysSerLeuAspG 926
QY 1809 AGAATATTTCACCTCAAGCAAAATAATGTGGCTTCAACAGCAATTAGTTCATCCAC 1868
Db 926 InLysLeuPheGlnLeuGlnSerLysAsnMetTrpLeuGlnGlnLeuValHisAlaH 946
QY 1869 ATAANGAAGCTGCAACAAAGCAAGATACAAATTCATTTTCATTTCCTTGAGAGAAA 1928
Db 946 is-LysLysAlaAspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLys 965
QY 1929 ATGCN-CATCATCTTCTTAAAGAGAAAATGAGAGATATTTTACNATTAACCATTTA 1987
Db 966 MetGlnHisHisLeuLeuLysGluLysAsnGluIlePheAsnTyrAsnAsnHisLeu 985
QY 1988 AAAAACCCGTATATTCAATATGCAAAAAAATAAAAAA 2027
Db 986 LysAsn-ArgIleTyrGlnTyrGluLysGluLysAlaGlu 998
RESULT 2
US-09-604-287A-475
; Sequence 475, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillon, Devin C.
; APPLICANT: Mitcham, Jennifer L.

APPLICANT: Xu, Jiangchun
APPLICANT: Harlocker, Susan L.
APPLICANT: Hepler, William T.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER

Alignment Scores:		
Pred. No.:	2.51e-300	Length:
Score:	3261.00	Matches:
Percent Similarity:	97.19%	Conservative:
Best local Similarity:	96.75%	Mismatches:
Query Match:	95.93%	Indels:
DB:	4	Gaps:
		0
		15
		3
		1002

US-09-602-362E-15 (1-2030) x US-09-604-287A-475 (1-1002)

QY	9	GT	TAAAGATGGTCTTCTGAGGCTAACTGCGGAATGAAAGTTTCTATTCCAACTAAAGCC	68
Db	327	Val	lysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla	346
QY	69	TTA	GAATTGATGCAGCATGCAAACTTTCAAAGCAGAGCTCCGAGAAAGCCATCTGCCTTC	128
Db	347	Leu	GlulLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe	366
QY	129	GAG	CGTGCAATTGAATGCAAAAGTCTGTTCCAAATAAGCCTTGGNATGAAGATGAA	188
Db	367	Glu	ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu	386
QY	189	CAA	CATTGAGAGCAGATCAGATACCTCCCATCAGAATCCAAACAAAGGACTATGAAGAA	248
Db	387	Gln	ThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTyrGluGlu	406
QY	249	AGT	CTTCTGGGATCTGACAGTCTGTGAGACTGTTTCAGAGAGAGTGTGTTCACCC	308
Db	407	Ser	SerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro	426
QY	309	AGG	CTACACATCAAAAAAGAAATAGATAAAATAAATAGAAAATTAGAAGTCTCTCGAT	368
Db	427	Lys	Ala**HisGlnLysGluIleAspLysIleAsnGlyLysLeuGluGluSerProAsp	446
QY	369	AAT	GATGGTTTTCTCAAGGCTCCCTGCAGATGAAAGTTTCTATTCCAACTAAAGCCTTA	428
Db	447	Asn	AspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu	466
QY	429	GAA	TGTGACATCCAAACTTCAAGCAGAGGCTCCGAGAAAGCCATCTGCCTTCGAG	488
Db	467	Glu	LeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu	486
QY	489	CTG	CCATTGAAATCCAAAGTCTGTTCCAAATAAAGCCTTGGAAATGAAGATGAACAA	548
Db	487	Pro	AlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln	506
QY	549	ACAT	TGAGAGATCAGATCTCCCTTCAGATCAAAATCAAAACAAAGAGCTTGAAGAAAT	608
Db	507	Thr	LeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn	526
QY	609	TCT	CGGATCTGAGGTTCCGTGACACTGTTTCACAGAAAGATGTGTGTACCCAG	668
Db	527	Ser	TrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys	546

QY 1749 TGTNTCAAACGCAACAGATATGTCAGACAAACACACTGACAGCAGGAGTCTTAGATC 1808
Db |||||
QY 906 eTyrGlnAsnGluGlnAspAsnValAsnLysHisThrGluGlnGlnGluSerLeuAspG 926
Db |||||
QY 1809 AGAAATATTTCACATACAAAGCAAAATATGTCCTTCAACAGCAATAGTTCATGCAC 1868
Db |||||
QY 926 LnllysLeuPheGlnLeuGlnSerLysAsnMetTrpLeuGlnGlnLeuValHisAlaH 946
QY 1869 ATAANGAACTCACACAAACCAAGATACAAATGATNTTCATTNTCTTCAGAGGAAA 1928
Db |||||
QY 946 is-LysLysAlaAspAsnLysSerLysLysLeuThrLysAlaPheLysLeuGluArgLys 965
QY 1929 ATGCN-CATCATCTTCTAAAGAGAAAATAGAGAGATATTNATACNATACCATTTA 1987
Db |||||
QY 966 MetGlnHisLysLeuLysGluLysAsnGluLysPheAsnTyrAsnAsnHisLeu 985
QY 1988 AAAACCCGATATTTCAATATCGAAAATAAATAAATAAATAAATAAATAAATAAATAA 2027
Db |||||
QY 986 LysAsn-ArgLysTyrGlnTyrGlnLysGluLysAlaGlu 998
Db |||||
RESULT 3
US-09-834-759-475
; Sequence 475, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuguo
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 475
; LENGTH: 1002
; TYPE: PRT
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(1002)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-834-759-475
Alignment Scores:
Pred. No.: 2,51e-300 Length: 1002
Score: 3261.00 Matches: 654
Percent Similarity: 97.19% Conservative: 3
Best Local Similarity: 96.75% Mismatches: 15
Query Match: 95.83% Indels: 5
DB: 4 Gaps: 0
US-09-602-362E-15 (1-2030) x US-09-834-759-475 (1-1002)
QY 9 GTTAAAGATGCTCTCTGAAGGCTAACTGCGGAATGAAAGTTTCTATTCCAACTAAAGCC 68
Db |||||
QY 327 ValLysAspGlyLeuLeuLysLysAlaAsnGlyMetLysValSerLeuProThrLysAla 346
QY 69 TTGAATTTGATGCATGCACAACTTTCAAAGCAGAGCTCCCGAAGAGCCATCTGCCTTC 128
Db |||||
QY 347 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 366
QY 129 GAGCTCCCATTTGAATGCAAAAGTCTGTTCCAAATTAAGCCTTGAATGAGATGAA 188
Db |||||
QY 367 GluProAlaLeuGluMetGlnLysSerValProAsnLysAlaLeuGluLysAsnGlu 386
QY 189 CAAACATTGAGCAGATGAGTACTCCCATCAGAAATCCAAACAAAGGACTATGAGAA 248
Db |||||

Db 387 GlnThrLeuArgAlaAspGluLeuLeuProSerGluSerLysGlnLysAspTyrGluGlu 406
QY 249 AGTTCTTTGGGATTTCTGAGAGTCTCTGTGAGACTGTTTTCAGAGAGGATGTGTCTTACCC 308
Db |||||
QY 407 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGCTTCACATCAAAAGAAATAGATAATAATAATGGAATAATAGAGAGTCTCTCTGAT 368
Db |||||
QY 427 LysAla***HisGlnLysGluLeuAspLysLeuAsnGlyLysLeuGluGluSerProAsp 446
QY 369 AATCATGCTTTCTGAAGGCTCCCTGCAGAAATGAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db |||||
QY 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerLeuProThrLysAlaLeu 466
QY 429 GAATTTGATGACATGCAAACTTTCAAAGCAGAGCTCCCGAAGAGCCATCTGCTTCGAG 488
Db |||||
QY 467 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 486
QY 489 CCTGCCATTGAATGCAAAAGTCTGTTCCAAATAAAGCCTTGAAATTTGAAGAATGAACAA 548
Db |||||
QY 487 ProAlaLeuGluMetGlnLysSerValProAsnLysAlaLeuGluLysAsnGluGln 506
QY 549 ACATTGAGCAGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGGTTGAAGAAAAT 608
Db |||||
QY 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 526
QY 609 TCTTGGGATTTCTGAGACTCTCCGTGAGACTGTTTTCAGAGAGGATGTGTGTACCCAAAG 668
Db |||||
QY 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GCTACACATCAAAAGAAATGGAATAAATAAGTGAATAAATAAGTGAATAAATAAGTGAATA 728
Db |||||
QY 547 AlaThrHisGlnLysGluMetAspLysLeuSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAAAATCTTGGATACAGTTCATCTTGTGAAAGACCAAGGAGACTTCAAAAGATCAC 788
Db |||||
QY 567 SerLysLeuLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACCACTACAGAAATAATGGAATAAATAAGTGAATAAATAAGTGTGTACTGAAATAAG 848
Db |||||
QY 587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 606
QY 849 AAATGTCAGAAAGCAAAATAAATAATCAAGTTAGAACACCAAAAGTAAATGCGAA 908
Db |||||
QY 607 LysLeuSerGluAlaLysGluLeuLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 626
QY 909 CAAGAGCTCTGAGTGTGAGATTCACCTTAAACCAAGAGAGAGAGAGAGAGAGAGAGAG 968
Db |||||
QY 627 GlnGluLeuCysSerValArgLeuThrLeuAsnGlnGluGluLysArgAsnAla 646
QY 969 GATATATTAAATGAAAAATTTAGGAAAGAAATTAGGAAAGAAATCGAAGACGATAGAAA 1028
Db |||||
QY 647 AspileLeuAsnGluLysLysLeuArgGluLeuGlyArgLeuGluGluGlnHisArgLys 666
QY 1029 GAGTTGAGGTGAACCAACACTTGAACAGCTCTCAGAGATACAGATATAGATTAATCAAG 1088
Db |||||
QY 667 GluLeuGluValLysGlnGlnLeuGluGlnAlaLeuArgLeuGlnAspLeuGluLeuLys 686
QY 1089 AGTGTAGAAAGTAAATTTGAATCAGGTTTCTCAGCTCATGAAATGAAATATATCTCTTA 1148
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QY 1149 CATGAAATTCATGTTTGAAGAAAGAAATGCGCATGCTAAACTGGAATAATGACACACTG 1208
Db |||||
QY 707 HisGluAsnCysMetLeuLysGluLeuAlaMetLeuLysLeuGluLeuAlaThrLeu 726
QY 1209 AAACACCAATACCAAGAAAGAAATAAATAATCTTTGAGGACATTAAGATTTTAAAGAA 1268
Db |||||
QY 727 LysHisGlnTyrGlnGluLysGluAsnLysTyrPheGluAspLysLysLysLysLysGlu 746
QY 1269 AAGATGCTGACTTCACTGATGACCTTAACTGAAGAGGAGTCAATCACTTAAAGGCGCA 1328
Db |||||
QY 747 LysAsnAlaGluLeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAla 766
Db |||||

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QY 1329 TCTCAATATAGTGGGAGCTTAAGTCTGATAGCTGAGACACATGCTCACTCTCAA 1388
Db 767 SerGlnTyrSerGlyGlnLeuLysValLeuLeuAlaGlnAsnThrMetLeuThrSerLys 786
QY 1389 TTGAAGGAAACAAAGCAAGAAATCTAGAGCGAGAAATTCATCAACACCATCTCAGA 1448
Db 787 LeuLysGlnLysGlnAspLysGlnLeuLeuGluAlaGlnLeuSerHisHisProArg 806
QY 1449 CTGGCTTCCTGCTACAGACCATGATCAATTCATGACATCAAGAAAAGTCAAGACCT 1508
Db 807 LeuAlaSerAlaValGlnAspHisAspGlnLeuValThrSerArgLysSerGlnGluPro 826
QY 1509 GCTTTCCACATTCAGAGATGCTGTTTGCAGAGAAATCAATTCATGCTAGTACT 1568
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Db 847 Thr-IleTyrAsnAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLy 866
QY 1629 AAGCCTAAATAATTAATCTCAATTCATGAGAGATGCTCTAAGAGAAAAATACATTTGTTTC 1688
Db 866 sSerLeuLysIleAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSe 886
QY 1689 AGGAATCATGCAAGAGACCAACGTAACACAGTGTCAATGTAAGAGAGCTGAACACA 1748
Db 886 r-GluHisAlaGlnArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisM 906
QY 1749 TGNNTCAAACGCAAGATNATGTGCAACAAACACACTGANCAGCAGGAGTCTCTAGATC 1808
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QY 1809 AGAAATATTTCAACTACAAAGCAAAATATGTGGCTTCAACAGCAATTAGTTCATGCAC 1868
Db 926 InLysLeuPheGlnLeuGlnSerLysAsnMetTrpLeuGlnGlnGlnLeuValHisAlaH 946
QY 1869 ATAAGAAGCTGACACAAACAGCAGATAACAAATGATNTTCATNTCTTCAAGAGGAAA 1928
Db 946 is-LysLysAlaAspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLys 965
QY 1929 ATGCN-CATCATCTCTTAAAGAGAAAAATGAGGAGATATTTNATTCNATTAACCATTTA 1987
Db 966 MetGlnHisHisLeuLeuLysGlnLysAsnGluGluIlePheAsnTyrAsnAsnHisLeu 985
QY 1988 AAAAACCCGTATTTCAATATGGAAGAAAAAANAANAANA 2027
Db 986 LysAsn-ArgIleTyrGlnTyrGluLysGluLysAlaGlu 998
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RESULT 4

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US-09-620-405B-493
; Sequence 493, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Repler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 493
; LENGTH: 1095
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: variant
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; LOCATION: (1)...(1095)
; OTHER INFORMATION: Xaa = Any amino acid
US-09-620-405B-493
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Alignment Scores:

Pred. No.:	2,59e-300	Length:	1095
Score:	3261.00	Matches:	654
Percent Similarity:	97.19%	Conservative:	3
Best Local Similarity:	96.75%	Mismatches:	15
Query Match:	95.83%	Indels:	5
DB:	4	Gaps:	0

US-09-602-362E-15 (1-2030) x US-09-620-405B-493 (1-1095)

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Db 420 VallysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 439
QY 69 TTAGAAATGATGACATGCACAACTTTCAAAGCAGAGCTCCCGAGAGACCATCTGCCTTC 128
Db 440 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPhe 459
QY 129 GAGCTGCTCATTAATGCAAAAGTCTGTTCCAAATTAAGCTTGGAAATGAAGAATGAA 188
Db 460 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 479
QY 189 CAAACATTCAGAGCAGATGAGATATCTCCCATCAGAAATCCAAACAAAGGACTATGAAGAA 248
Db 480 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTyrGluGlu 499
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Db 500 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 519
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Db 600 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 619
QY 609 TCTTGGGATTCAGAGTCTCCGTGAGACTGTTTCACAGAAAGGATGTGTGTACCCCAAG 668
Db 620 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 639
QY 669 GCTACACATCAAAAGAAATGGATAAATAAGTGGAAAAATAGAAATTCACATGAGCCTA 728
Db 640 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 659
QY 729 TCAAAAATCTGGATACAGTTCATCTTGTGAAAGAGCAAGGAACTTCAAAAAGATCAC 788
Db 660 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 679
QY 789 TGTGAAACAGCTACAGAAAAATGGAAACAAATGAAAGAAAGTTTGTGTACTGAAAG 848
Db 680 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 699
QY 849 AAACCTGTCAGACCAAGAAATTAATACACTTAGAGACCAACCAAGTAATTCGAA 908
Db 700 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 719
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QY 909 CAAGAGCTCTGAGTGTGAGATTGACCTTTAAACCAAGAAAGAGAGAAATGCCC 968
 Db 720 GlnGluLeuCySerValArgLeuThrLeuAsnGlnGluGluLeuLysArgAsnAla 739
 QY 969 GATATATTAATGAAGAAATTCGGAGGAAATAGGAGAAATCGAAGAGCAGATAGAAA 1028
 Db 740 AspLeuAsnGlnLysIleArgGluLeuGlyArgIleGluGlnHisArgLys 759
 QY 1029 GAGTTAGAGTGAACCAACCACTTGAAACAGGCTCTCAGAAATCAAGATATAGAATTGAAG 1088
 Db 760 GluLeuGluValLysGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLys 779
 QY 1089 AGTGTAGAAAGTAAATTGAATCAGGTTCTCACACTCATGAAATCAAAATATCTCTTA 1148
 Db 780 SerValGluSerAsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnThrLeuLeu 799
 QY 1149 CATGAAATTCGATGTTGAAAAGGAAATTCCTCATGCTAAACTGGAATAGCCACTG 1208
 Db 800 HisGluAsnCyMetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeu 819
 QY 1209 AACACCAATACCAAGGAAAGAAATTAATATCTTGAAGACATTAAGATTTTAAAGAA 1268
 Db 820 LysHisGlnThrGlnGluLysGluAsnLysThrPheGluAspIleLysLeuLysGlu 839
 QY 1269 AAGAATCTGAATCTCAGATGACCTTAAACTGAAAGAGGAATCATTAATAAAGGCA 1328
 Db 840 LysAsnAlaGluLeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAla 859
 QY 1329 TCTCAATATATGTCGAGCTTAAAGTTCTCATAGCTGAGAACACAATGCTCATCTTAA 1388
 Db 860 SerGlnThrSerGlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLys 879
 QY 1389 TTGAAGAAAAACAGACAAAGAAATCTAGAGGCAAAATTCGAATCAACACATCTAGA 1448
 Db 880 LeuLysGluLysGlnAspLysGluIleLeuGluAlaGluIleGluSerHisThrProArg 899
 QY 1449 CTGCTTCTGCTGTACAGACCAATGATCAAAATGTGACATCAAGAAAAAGTCAAGAACCT 1508
 Db 900 LeuAlaSerAlaValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluPro 919
 QY 1509 GCTTTCACATTCAGAGATGCTTTGTCRAAGAAAAATGAATGATGTGAGTACT 1568
 Db 920 AlaPheHisIleAlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSer 939
 QY 1569 ACCGATATATAACATCAGAGTGTCCATCAACACATTTCTGAAGCTCAAGGAAATCCAN 1628
 Db 940 Thr-IleThrAsnAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLys 959
 QY 1629 AAGCTTAAATTAATCTCAATTATGAGAGATGCTCTAAGAGAAATACATGCTTTC 1688
 Db 959 sSerLeuLysIleAsnLeuAsnThrAlaGlyAspAlaLeuArgGluAsnThrLeuValSe 979
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 QY 1749 TGTNTCAAANGCAACAAGATNATGTGAACAAACACACTGANCAGAGAGTCTCTAGATC 1808
 Db 999 etThrGlnAsnGluGlnAspAsnValAsnLysHisThrGluGlnGlnGluSerLeuAspG 1019
 QY 1809 AGAATATTCTCACTCAAGCAAGAAATATGTGCTTCAACAGCATTAAGTTTCATGCAAC 1868
 Db 1019 InLysLeuPheGlnLeuGlnSerLysAsnMetThrLeuGlnGlnGlnLeuValHisAlaH 1039
 QY 1869 ATAANGAAAGCTGACAACAAAGCAAGATATCAATTCATNTTCATTTCCTGAGAGAAA 1928
 Db 1039 is-LysLysAlaAspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLys 1058
 QY 1929 ATGNC-CATCATCTCTTAAAGCAAGAAATCAGAGATATTTATACNATATACCATTTA 1987
 Db 1059 MetGlnHisHisLeuLeuLysGluLysAsnGluGluIlePheAsnThrAsnHisLeu 1078

QY 1988 AAAAACCCGTATATTTCATATATGAAAAAANAANAANA 2027
 Db 1079 LysAsn-ArgIleThrGlnThrGluLysGluLysAlaGlu 1091
 RESULT 5
 US-09-834-759-493
 ; Sequence 493, Application US/09834759
 ; Patent No. 6680197
 ; GENERAL INFORMATION:
 ; APPLICANT: Jiang, Yugu
 ; APPLICANT: Dillon, Devin C.
 ; APPLICANT: Mitcham, Jennifer L.
 ; APPLICANT: Xu, Jiangchun
 ; APPLICANT: Harlocker, Susan L.
 ; APPLICANT: Hepler, William T.
 ; APPLICANT: Henderson, Robert A.
 ; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
 ; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
 ; FILE REFERENCE: 210121.470C9
 ; CURRENT APPLICATION NUMBER: US/09/834,759
 ; CURRENT FILING DATE: 2001-04-13
 ; NUMBER OF SEQ ID NOS: 547
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 493
 ; LENGTH: 1095
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: variant
 ; LOCATION: (1)...(1095)
 ; OTHER INFORMATION: Xaa = Any amino acid
 US-09-834-759-493
 Alignment Scores:
 Pred. No.: 2,59e-300 Length: 1095
 Score: 3261.00 Matches: 654
 Percent Similarity: 97.19% Conservative: 3
 Best local Similarity: 96.75% Mismatches: 15
 Query Match: 95.83% Indels: 5
 DB: 4 Gaps: 0
 US-09-602-362E-15 (1-2030) x US-09-834-759-493 (1-1095)
 QY 9 GTTAAAGATGCTCTCTCAAGGCTAACTGCGGATGAAGTTCTTATTCCAACTAAAGCC 68
 Db 420 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 439
 QY 69 TTAGAATTGATGGACATCGAACTTTCAAGCAGAGCCTCCCGAGAGCCATCTGCCTTC 128
 Db 440 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 459
 QY 129 GAGCTGCGCATTAATGCAAAAGTCTGTTCCAATAAGCCTTGAATTAAGAAAGTAA 188
 Db 460 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 479
 QY 189 CAACATTGAGACGACATGAGATCTCCATCAGATCTCCAACTCAAGATCTCAAGAGGACTATGAAGAA 248
 Db 480 GlnThrLeuArgAlaAspGluIleuProSerGluSerLysGlnLysAspThrGluGlu 499
 QY 249 AGTCTTGGGATCTGAGAGTCTCTGTGAGACTGTTTCACAGAGGATGTGTGTTTACCC 308
 Db 500 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 519
 QY 309 AAGGCTACACATCAAAAAGAAATAGATAAATAATGAAATAGAAAGTCTCTCCGAT 368
 Db 520 LysAla***HisGlnLysGluIleAspLysIleAsnGlyLysLeuGluGluSerProAsp 539
 QY 369 AATGATGTTTCTGAAGGCTCCCTGCAAGATGAAGTTCTTATTCACACTAAAGCCTTA 428
 Db 540 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 559
 QY 429 GAATTGATGGACATCAACTTCAAGCAGAGCCTCCCGAGAGCCATCTGCCTTCGAG 488

560 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 579
489 CTTGCCATTGAATGCAAAAGCTCTGTTCCAAATAAAGCCCTGGAATTGAAGATGAACAA 548
580 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 599
549 ACATTGAGAGCAGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGGCTTCAAGAAAT 608
600 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 619
609 TCTTGGAATCTGAGAGTCTCCCTGAGAGCTGTTTCAAGAAGGATGTGTGTACCCCAAG 668
620 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 639
669 GCTTACACATCAAAAGCAAAATGATTAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 728
640 AlaThrHisGlnLysGlnMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 659
729 TCAAAATCTTGATACAGTTCATCTCTGTAAGAGCAAGGAACTTCAAAAGATCAC 788
660 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 679
789 TGTGACACAGTACAGGAAATGGAACAAATGGAACAAATGGAACAAATGGAACAAATGGA 848
680 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 699
849 AAATCTGTCAGAGCAAAAGAAATAAATCACAGTTAGAGAACCAAAAGTAAATGGGAA 908
700 LysLeuSerGluAlaLysGluLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 719
909 CAAGAGCTGAGGTGAGTGTACTTAAACCAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 968
720 GlnGluLeuCysSerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAla 739
969 GATATATTAATGAAAAATAGGAAGAAATAGGAAGAAATAGGAAGAAATAGGAAGAAAT 1028
740 AspIleLeuAsnGlnLysIleArgGluGluLeuGlyArgIleGluGlnHisArgLys 759
1029 GAGTTAGAGTGAACAAACAACTTGAACAGGCTCTCAGAAATCAAGATATAGATTAAG 1088
760 GluLeuGluValLysGlnGlnLeuGluAlaLeuArgIleGlnAspIleGluLysLys 779
1089 AGTTAGAGAAATTAATTAATGAGTCTCTACACTCATGAATGAATGAATTAATTAAT 1148
780 SerValGluSerAsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeu 799
1149 CATGAAATTCATGTTGAAAAAGAAATTCGATGCTAAAGTGAAGTGAAGTGAAGTGAAG 1208
800 HisGluAsnCysMetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeu 819
1209 AAACCAATACAGGAAAGAAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1268
820 LysHisGlnTyrGlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGlu 839
1269 AAGAATGCTGAACCTTCAGATGACCTTAAAGTGAAGAGGAAATTAATTAATTAATTAAT 1328
840 LysAsnAlaGluLeuGlnMetThrLeuLysLeuLysGluLysLeuThrLysArgAla 859
1329 TCTCAATATAGTGGGAGCTTAAATTCGTAGTGTAGTGTAGTGTAGTGTAGTGTAGTGTAA 1388
860 SerGlnTyrSerGlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLys 879
1389 TTGAAGGAAAAACAAGAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1448
880 LeuLysGluLysGlnAspLysGluLeuGluAlaGluIleGluSerHisPheProArg 899
1449 CTGGCTTCTGTTGACAAGCATCATCAATTAATTAATTAATTAATTAATTAATTAATTAAT 1508
900 LeuAlaSerAlaValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluPro 919
1509 GCTTTCCATTCAGAGGAGCTGTTGTTGCAAGAAATTAATTAATTAATTAATTAATTAAT 1568
920 AlaPheHisIleAlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSer 939

RESULT 6

US-09-620-405B-473 ; Sequence 473, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C8
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 473
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-620-405B-473

Alignment Scores:
Pred. No.: 1,82e-198 Length: 445
Score: 2184.00 Matches: 427
Percent Similarity: 99.77% Conservative: 0
Best Local Similarity: 99.77% Mismatches: 1
Query Match: 64.18% Indels: 0
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-620-405B-473 (1-445)

QY 9 GTTAAAGATGCTCTTCTGAGGCTAACTGCGAATGAAAGTTTCTTATTCACACTAAGCC 68
Db 15 VallyAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 34
QY 69 TTGAATTTGATGACATGCAAACTTTCAAAGCAGACCTCCCGAGAGCATCTGCTTC 128

Db 35 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 54
Qy 129 GAGCCTGCCATTGAAATGCAAAAGTCTGTTCCAAATTAAGCCTTGAATGAAGATGAA 188
Db 55 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 74
Qy 189 CAACACATTGAGACAGATGAGATCTCCCATCAGATCCAAACAAAGGACTATGAAGA 248
Db 75 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspThrGluGlu 94
Qy 249 AGTTCTTGGGATCTCAGAGTCTCTGTGAGACTGTTTTCACAGAAGGATCTGTTCACC 308
Db 95 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 114
Qy 309 AAGGCTACATCAAAAAGAAATAGATATAATGGAATGGAATGGAAGTCTCTGAT 368
Db 115 LysAlaAlaHisGlnLysGluIleAspLysIleAsnGlyLysLeuGluSerProAsp 134
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Db 135 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 154
Qy 429 GAATGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAGCCATCTGCCTTCGAG 488
Db 155 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 174
Qy 489 CCTGCCATTCGAATGCAAAAGTCTGTTCCAAATTAAGCCTTGGAAATGGAAGTGAACAA 548
Db 175 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 194
Qy 549 ACATTGAGACAGATCAGATGTTCCCTTCAGATCAAAACAAAGAGGTTGAAGAAAT 608
Db 195 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLysValGluGluAsn 214
Qy 609 TCTTGGATTCAGAGTCTCCCTGAGAGCTTTCACAGAGGATCTGTGTACCCAG 668
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Qy 669 GCTACACATCAAAAAGAAATGGAATAAATGAAGTGAAGAAATGGAAGTCAACTAGCCTTA 728
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Qy 729 TCAAAAATCTTGATACAGTTCATCTGTGAAAGAGCAGGAACTTCAAAAGATCAC 788
Db 255 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 274
Qy 789 TGTGAACACGCTACAGGAAATGGAACAAATGGAATAAATGGAATAAATGGAATAAATGGA 848
Db 275 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 294
Qy 849 AAAGTGTGAGAGCAAGAAATTAATACAGTGTAGAGCAACCAAAAGTTAAATGGGAA 908
Db 295 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 314
Qy 909 CAAGAGCTCTGAGTGTGAGATGACTTTAAACCAAGAGCAAGAGAGAGAGAGAGAGAGAG 968
Db 315 GlnGluLeuCysSerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAla 334
Qy 969 GATATATTAATGAAATAATAGGAAGATTAAGGAATTCGAAGAGCAGCAGTACGAAA 1028
Db 335 AspIleLeuAsnGluLysIleArgGluLeuGlyArgIleGluGlnHisArgLys 354
Qy 1029 GAGTTAGAGTGAACCAACTTGAACAGCTCTCAGATACAGATACAGATACAGATACAGAT 1088
Db 355 GluLeuGluValLysGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLys 374
Qy 1089 AGTGTAGAAAGTAAATTTGAATTCAGGTTTCTCACATCAATGAAATGAAATTAATCTCTTA 1148
Db 375 SerValGluSerAsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTrpLeuLeu 394
Qy 1149 CATGAAATTCGATGTTGAAAGAGAAATTCGATGCTTAAATTCGAAATTCGAAATTCGAA 1208
Db 395 HisGluAsnCysMetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeu 414

Qy 1209 AAACACCAATACAGGAAAGGAAATATAATATACTTTGAGGACATTAAAGATTTTAAAGAA 1268
Db 415 LysHisGlnThrGlnGluLysGluAsnLysIlePheGluAspLysLeuLeuLysGlu 434
Qy 1269 AAGAATCTGAATTCAGATGACC 1292
Db 435 LysAsnAlaGluLeuGlnMetThr 442
RESULT 7
US-09-433-826B-473
; Sequence 473, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqi
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433.826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 473
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-433-826B-473
Alignment Scores:
Pred. No.: 1.82e-198 Length: 445
Score: 2184.00 Matches: 427
Percent Similarity: 99.77% Conservativity: 0
Best Local Similarity: 99.77% Mismatches: 1
Query Match: 64.18% Indels: 0
DB: 4 Gaps: 0
US-09-602-362E-15 (1-2030) X US-09-433-826B-473 (1-445)

Qy 9 GTTAAAGATGCTCTCTGAAGCTAAGTTCCTTCAAGTAAAGTTTCTATTCCAACTAAAGCC 68
Db 15 VallyaspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 34
Qy 69 TTAGAATTGATGACATGCAAACTTTCAAGCAGAGCTCCCGAGAGCCATCTGCCTTC 128
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Qy 129 GAGCCTGCATTGAAATGCAAAAGTCTGTTCCAAATTAAGCCTTGAATGAAGATGAA 188
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Qy 189 CAACACATTGAGACAGATGAGATCTCCCATCAGATCCAAACAAAGGACTATGAAGA 248
Db 75 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspThrGluGlu 94
Qy 249 AGTTCTTGGGATCTCAGAGTCTCTGTGAGACTGTTTTCACAGAAGGATCTGTTCACC 308
Db 95 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 114
Qy 309 AAGGCTACATCAAAAAGAAATAGATATAATGGAATGGAATGGAAGTCTCTGAT 368
Db 115 LysAlaAlaHisGlnLysGluIleAspLysIleAsnGlyLysLeuGluSerProAsp 134
Qy 369 AATGATGCTTTCTGAGGCTCCCTGCAGATGAAAGTTTCTATTCCTCAACTAAGCCTTA 428
Db 135 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 154
Qy 429 GAATGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAGCCATCTGCCTTCGAG 488
Db 155 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 174

489 CCTGCCATTCAATGCAAAAGTCTGTTCCAAATTAAGCCCTTGAATTAAGAAATGAACAA 548
175 ProAlaileGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 194
549 ACATTGAGACAGATCAGATGTTCCCTTTCAGAAATCAAAACAAAGAGGTTCGAAGAAAT 608
195 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLysLysValGluGluAsn 214
609 TCTTGGGATCTGAGAGTCTCCGTGAGAGCTGTTTCCAGAGAGATGTTGTGTACCCAAAG 668
215 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 234
669 GCTACACATCAAAAGAGATGATTAATAAGTGAAGGAAATTAAGATCACTAGCCCTA 728
235 AlaThrHisGlnLysGluMetAspLysLysLysLysLysLysLysLysLysLysLys 254
729 TCAAAATCTTGATCAGTTCATCTTGTGAAGAGCAAGGAACTTCAAAAGATCAAC 788
255 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 274
789 TGTGAACAACGTACAGGAAATGGAACAATCAAAAGAAAGTGTGTCTACTGAAGAAG 848
275 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 294
849 AAATCTCAGAGCAAAAGAAATAAATCACAGTTAGAGAACCAAAAGCTTAAATCGGAA 908
295 LysLeuSerGluAlaLysGluLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 314
909 CAAGACTCTGCAGTGTGAGTTCATCTTAACCAAGAGAGAGAGAGAGAGAGAGAGAG 968
315 GlnGluLeuCysSerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAla 334
969 GATATATTAAATGAAATTAAGGAAAGTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1028
335 AspIleLeuAsnGluLysIleArgGluLeuGlyArgIleGluGlnHisArgLys 354
1029 GAGTGAAGTGAACAACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1088
355 GluLeuGluValLysGlnGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLys 374
1089 AGTGTAGAAGTAATTTGAATCAGGTTCTCACACTCATGAAATGAAATATCTCTTA 1148
375 SerValGluSerAsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeu 394
1149 CATGAAATCATGTTGAAAAGGAAATGCAATGCTGCTAAAATGCAATGCAATGCAATG 1208
395 HisGluAsnCysMetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeu 414
1209 AAACCAATACAGCAAGGAAATTAATAATTAATTAATTAATTAATTAATTAATTAATTA 1268
415 LysHisGlnTyrGlnGluLysGluAsnLysTyrPheGluAspIleLysLysLysGlu 434
1269 AAGAATGCTGAATTCAGATGACC 1292
435 LysAsnAlaGluLeuGlnMetThr 442

RESULT 8

US-09-604-287A-473
; Sequence 473, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Repler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22

; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 473
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-604-287A-473
Alignment Scores:
Pred. No.: 1,82e-198 Length: 445
Score: 2184.00 Matches: 427
Percent Similarity: 99.77% Conservative: 0
Best Local Similarity: 99.77% Mismatches: 1
Query Match: 64.18% Indels: 0
DB: 4 Gaps: 0
US-09-602-362E-15 (1-2030) X US-09-604-287A-473 (1-445)
QY 9 GTTAAAGATGTCCTTCTGAAGCTAACTCGGGAATGAAGTTTCTATTCCAACCTAAAGCC 68
DB 15 VallyslaspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 34
QY 69 TTAGAATTGATGGACATGCACAACTTTCAAAGCAGAGCCTCCGAGAGAGCCATCTGCCTTC 128
DB 35 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPhe 54
QY 129 GAGCTGCTCAATTGAATGCACAAAGCTCTGTTCCAAATTAAGCCCTTGAATTAAGAAATGAA 188
DB 55 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 74
QY 189 CAAACATTGAGAGCAGATGAGATCTCCCATCAGAATCCAAACAAAGAGGACTATGAAGAA 248
DB 75 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTyrGluGlu 94
QY 249 AGTTCTTGGGATTCGAGAGTCTCTGTCAGACTGTTTTCACAGAAGGATGTGTGTACCC 308
DB 95 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 114
QY 309 AAGCTCACATCAAAAGAAATAGATAAATAATAATGAAATTAAGAGAGTCTCCTGAT 368
DB 115 LysAlaAlaHisGlnLysGluIleAspLysLysLysLysLysLysLysLysLysLys 134
QY 369 AATGATGTTTCTGAAGGCTCCCTGCAGAAATGAAGTTTCTATTCCAACCTAAAGCCCTTA 428
DB 135 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 154
QY 429 GAATTGATGACATGCAAACTTTCAAAGCAGAGCCTCCGAGAGAGCCATCTGCCTTCGAG 488
DB 155 GluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPheGlu 174
QY 489 CTTGCCATTCGAAATGCAAAAGTCTGTTCCAAATTAAGCCCTTGAATTAAGAAATGAA 548
DB 175 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 194
QY 549 ACATTGAGACAGATCAGATGTTCCCTTTCAGAAATCAAAACAAAGAGGTTGAGAAAT 608
DB 195 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLysLysValGluGluAsn 214
QY 609 TCTTGGGATTCGAGAGTCTCCGTGAGACTGTTTTCACAGAAGGATGTGTGTACCCAAAG 668
DB 215 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 234
QY 669 GCTACACATCAAAAGAGAAATGGATAAATAAGTGAAGAAATTAAGAAATCACTAGCCTA 728
DB 235 AlaThrHisGlnLysGluMetAspLysLysLysLysLysLysLysLysLysLysLys 254
QY 729 TCAAAATCTTGATCAGTTCATCTTGTGAAGAGCAAGGAACTTCAAAAGATCAAC 788
DB 255 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 274
QY 789 TGTGAACAACGTACAGGAAATGGAACAATCAAAAGAAAGTGTGTCTACTGAAGAAG 848
DB 275 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 294

Db 395 HisGluAsnCysMetLeuLysGluLeuAlaMetLeuLysGluLeuAlaThrLeu 414
QY 1209 AAACACCAATACAGGAAAGGAATAAATACTTTGAGGACATTAAGATTTTAAAGAA 1268
Db 415 LysHisGlnTyrGlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGlu 434
QY 1269 AGAATGCTGAATTCAGATGACC 1292
Db 435 LysAsnAlaGluLeuGlnMetThr 442

RESULT 10
US-09-389-681-181
; Sequence 181, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-389-681-181

Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
Gaps: 0
DB: 4

US-09-602-362E-15 (1-2030) x US-09-389-681-181 (1-432)

QY 741 GATACAGTTTCATTTGTGAAGAGCAAGGAACTTCAAAAAGATCACTGTGAACAAGCT 800
Db 1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY 801 ACAGGAAATTCGAACAAATGAAAGAGTTTGTGTACTGAAAGAACTGTGAGAA 860
Db 21 ThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLysLysLeuSerGlu 40
QY 861 GCAAAAAGAAATTAATACAGATTAGAGAACCAAAAAGTTTAAATGGGAACAAGAGCTCTGC 920
Db 41 AlaLysGluLysSerGlnLeuGluAsnGlnLysValLysTrpGluGlnGluLysCys 60
QY 921 AGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAGAAATGCCGATATATTAAT 980
Db 61 SerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAlaAspIleLeuAsn 80
QY 981 GAAAAATAGGGAAGAAATTAGGAACAATCGAAGACAGCATAGGAAGAGTTAGAGTG 1040
Db 81 GluLysIleArgGluGluLeuGlyArgIleGluGluGlnHisArgLysGluLeuVal 100
QY 1041 AAACAACAATTGAAACAGGCTCTCAGAAATACAGATATAGATTGAAGAGTTAGAAAGT 1100
Db 101 LysGlnGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLysSerValGluSer 120
QY 1101 AATTTGAATCAGTTTCTCACCTCATGAAATGAAATATCTCTTACATGAAATTCG 1160
Db 121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
QY 1161 ATGTTGAAAAAGGAAATGCCATGCTTAAACCTGGAATAGCCACATGAAACCAACATAC 1220
Db 141 MetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160

QY 1221 CAGAAAAGGAAATAAATACTTTGAGGACATTAAGATTTTAAAGAAAGAAATGCTGAA 1280
Db 161 GlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
QY 1281 CTTGAGATGACCCCTAAAACTGAAAGAGGAAATCACTAACTAAAGGGCATCTCAATATAGT 1340
Db 181 LeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSer 200
QY 1341 GGGCAGCTTAAAGTTCTGATAGCTGAGAACACAAATGCTCACTTCTAAATGAAGGAAAA 1400
Db 201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
QY 1401 CAAGACAAAAGAAATACCTAGAGGCGAGAAATTTGAATCACCACTCTAGCTGCTTCTGCT 1460
Db 221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAla 240
QY 1461 GTACAGACCAATGATCAAAATTTGCACATCAAGAAAAAGTCAAGAACCTGCTTTCCACAT 1520
Db 241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
QY 1521 GCAGGAGATGCTTTTTCAAAAGAAAAATGAATGTTGATGTAGTAGTACCGATATATAA 1580
Db 261 AlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrAs 280
QY 1581 CAATGAGGTGCTCCATCAACCACTTCTGAGCTCRAAGGAATCCANAAGCCTAAAAAT 1640
Db 280 AsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysI 300
QY 1641 TAATCTCAATATGTCAGGAGATGCTCTAAGAGAAAAATACATTTGCTTTTCAGGAACATGCAC 1700
Db 300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaG 320
QY 1701 AAAGAGACCAACCTGAAACACAGTGTCAATGAAGGAAGCTGACACATGNTCAANCG 1760
Db 320 InArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnG 340
QY 1761 AACAAAGATNATGTCAACAAACACACTGANCAGCAGGAGTCTCTAGATCAGAAAAATTTTC 1820
Db 340 luGlnAspAsnValAsnLysHisThrGluGlnGlnGlnSerLeuAspGlnLysLeuPheG 360
QY 1821 AACTACAAAAGAAAAATATGTGGCTTCAACAGCAATTAAGTTTCATGTCACATAAAGAAAGCT 1880
Db 360 InLeuGlnSerLysAsnMetTrpLeuGlnGlnGlnLeuValHisAlaHis-LysLysAla 379
QY 1881 GACAAACAAAAGCAAGATAACAAATTTGATNTCTTGAGAGCAAAAATGCN-CATCAT 1939
Db 380 AspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHis 399
QY 1940 CTTCTAAAGAGAAAAATGAGAGATATTNATACNATAACCATTTTAAAAAACCCGTAT 1999
Db 400 LeuLeuLysGluLysAsnGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgI 419
QY 2000 ATTTCAATATGAAAAAANAANAANA 2027
Db 419 eTyrGlnTyrGluLysGluLysAlaGlu 428

RESULT 11
US-09-620-405B-181
; Sequence 181, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20

```
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-620-405B-181

Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-620-405B-181 (1-432)

QY 741 GATACAGTTTCATCTTGTGAAAGCAGGAACTTCAAAAGATCACTGTGACAACT 800
Db 1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY 801 ACAGGAAAAATGCAACAAATGAAAGAAAGTGTGTGTACTGAAAGAAAGAACTGTGAGAA 860
Db 21 ThrGlyLysMetGluGlnMetLysLysPheCysValLeuLysLysLysLeuSerGlu 40
QY 861 GCAAGAAATAAATACAGTTAGAGAACCAAAAGTTAAATGGGAAACAGAGCTCTGCG 920
Db 41 AlaLysGluLysSerGlnLeuGluAsnGlnLysValLysTrpGluGlnLeuGluCys 60
QY 921 AGTGTGAGATTGACTTAAACCAAGAGAGAGAGAGAGAAATGCCGATATATTAAT 980
Db 61 SerValArgLeuThrLeuAsnGlnGluGluLysArgAsnAlaAspLeuLeuAsn 80
QY 981 GAAAAAATTAGGAGAAATPAGGAGAAATCGAAGACGACATAGGAAAGAGTTAGAGTG 1040
Db 81 GluLysIleArgGluGluLeuGlyArgIleGluGluGlnHisArgLysGluLeuGluVal 100
QY 1041 AACAACAACCTCAACAGCTCTCAGATACAGATATAGATTTGAGAGTGTAGAAAGT 1100
Db 101 LysGlnGlnLeuGlnAlaLeuArgIleGlnAspIleGluLeuLysSerValGluSer 120
QY 1101 AATTGCAATCAGTTTCTCACACTCATGAAATGAAATTTATCTTACATGAAATTTGC 1160
Db 121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
QY 1161 ATGTTGAAAGAAATTCGCATCTGCTAAACTGGAATAGCCACTGAAACCAACATAC 1220
Db 141 MetLeuLysGluLysIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160
QY 1221 CAGGAAAGGAAATATAATACITTTAGGACATTAAGATTTTAAAGAAAGAAATGCTGAA 1280
Db 161 GlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
QY 1281 CTTGAGATGACCTTAAACTGAAAGAGAAATCAATTAACATAAGAGGCATCTCAATATAGT 1340
Db 181 LeuGlnMetThrLeuLysLysLysGluGluSerLeuThrLysArgAlaSerGlnTyrSer 200
QY 1341 GGGCAGCTTAAAGTCTGTAGCTAGAGACACAACTGCTCACTTCTAAATTTGAAGGAAAAA 1400
Db 201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
QY 1401 CAAGACAAAGAAATATAGAGGCGAGAAATGGAATCACCATCTCTAGACTGCTTCTGCT 1460
Db 221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAla 240
QY 1461 GTACAGACCATGATCAATATGTCATCAACAAGAAAGTCAAGAACCTGCTTTCACATTT 1520
Db 241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
QY 1521 GCAGGAGATGCTGTGTTGCAAGAAAAATGAATGTTGATGTGAGTAGTACCGATATATAA 1580
Db 261 AlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrAs 280

QY 1581 CAATGAGGTGCTCCATCAACACACTTTCTGAAGCTCAAAAGGAAATCCANAAGCCCTAAATAAT 1640
Db 280 AsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIle 300
QY 1641 TAATCTCAATATGACAGGAGATGCTTAAGAGAAAAATACATTTGGTTTCAGAGAACATGCAC 1700
Db 300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaG 320
QY 1701 AAAGAGACCAACGTTGAAACACAGTGTCAAAATGAAGGAAAGCTGAACACATCTNTCAAANCG 1760
Db 320 LnaArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTy-GlnAsnG 340
QY 1761 AACAGATNATGTGAACAAACACACTGANCAGCAGGAGTCTCTAGATCAGAAATTTATTC 1820
Db 340 LuGlnAspAsnValAsnLysHisThrGluGlnGlnGluSerLeuAspGlnLysLeuPheG 360
QY 1821 AACTACAAAGCARRAATATGTGCTTCAACAGCAATTAGTTTCATGTCACATAANGAAGCT 1880
Db 360 LnaLeuGlnSerLysAsnMetTrpLeuGlnGlnLeuValHisAlaHis-LysLysAla 379
QY 1881 CACAACAAAAGCAAGATAACAATTTGATNTTTCATTTCTTGAGAGGAAAAATGCGN-CATCAT 1939
Db 380 AspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHis 399
QY 1940 CTTCTRAAAGAGAAAAATGAGGAGATATTNATTACNATTAACCATTTAAAAAACCCGTAT 1999
Db 400 LeuLeuLysGluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIle 419
QY 2000 ATTTCAATATGGAATAAAAAAANAANA 2027
Db 419 eTyrGlnTyrGluLysGluLysAlaGlu 428

RESULT 12
US-09-339-338-181
; Sequence 181, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yugui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339,338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-339-338-181

Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-339-338-181 (1-432)

QY 741 GATACAGTTTCATCTTGTGAAAGCAGGAACTTCAAAAGATCACTGTGACAACT 800
Db 1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY 801 ACAGGAAAAATGCAACAAATGAAAGAAAGTGTGTGTACTGAAAGAAAGAACTGTGAGAA 860
Db 21 ThrGlyLysMetGluGlnMetLysLysPheCysValLeuLysLysLysLeuSerGlu 40
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QY 861 GCAAAAGAAATTAATACAGTGTAGAGAACCAAAAGATTAAATGGGAACAAGAGCTCTGC 920
Db 41 AlaLysGluLeuLysSerGlnLeuGluAsnGlnLysValLysTrpGluGlnGluCys 60
QY 921 AGTGTGAGATTGACATTTAAACCAAGAAGAGAGAGAAATGCCGATATTAAT 980
Db 61 SerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAlaAspIleLeuAsn 80
QY 981 GAAAAANTTAGGAAGATTAGGAAGATCGAAGAGCAGCATAGGAAGAGTGAAGTG 1040
Db 81 GluLysIleArgGluGluLeuGluGlyArgIleGluGluGlnHisArgGlyGluLeuVal 100
QY 1041 AAACAACAACACTTGAACAGGCTCTCAGATACAGATATAGAAATGAAGAGTGTAGAAAGT 1100
Db 101 LysGlnGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLysSerValGluSer 120
QY 1101 AATTTGAATCAGTTCACACTCATGAAATGAATTAATCTTACATGAATATGC 1160
Db 121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
QY 1161 ATGTTGAAAAGAAATTCCTCATGCTTAAACTGGAATAGCCACACTGAAAACCAATAC 1220
Db 141 MetLeuLysGluLeuAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160
QY 1221 CAGGAAACGAAATTAATACCTTGAAGACATTAAGATTTTAAAGAAAGAAATCCTGAA 1280
Db 161 GlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
QY 1281 CTTGAGATCACCTTAACTGAAAGAGGAATCATTAACATAAGGCGATCTCAATATAGT 1340
Db 181 LeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSer 200
QY 1341 GGCAGCTTAAAGTTCTGTAGCTGAGACACAATGCTCACTTCTAAATGAAGAAATAA 1400
Db 201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
QY 1401 CAAGACAAAGAATACTAGAGCAGAAATTAATCACACCATCTAGCTGCTCTGCT 1460
Db 221 GlnAspLysGluLeuGluGluAlaGluIleGluSerHisProArgLeuAlaSerAla 240
QY 1461 GTACAAGACCATGATCAAAATTTGACATCAAGAAAGAAAGTCAAGAACCTGCTTCCACAT 1520
Db 241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
QY 1521 GCAGGAGATGCTTTGCAAGAAATAATGATGTTGATGTAGTACAGTAGTACCATATATA 1580
Db 261 AlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerThrIleTyrAs 280
QY 1581 CAATGAGGTGCTCATCAACCACTTCTCAAGCTCAAGCAATCCANAAGCTTAAAT 1640
Db 280 HisGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIle 300
QY 1641 TAATCTCAATTATGAGGAGATGCTCTAAGAAATAATACATTTGTTTTCAGGAACATGCMC 1700
Db 300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSerGluHisAlaG 320
QY 1701 AAAGACCAACGCTGAAACACAGTGTCAATAGGAAGCTGAACACATGTTTCAAAACG 1760
Db 320 LysArgGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnG 340
QY 1761 AACAGATNATGTGAACAAACACATGANCAGCAGGAGTCTCTAGATCAGAATATTTC 1820
Db 340 LuGlnAspAsnValAsnLysHisThrGluGlnGlnGluSerLeuAspGlnLysLeuPheG 360
QY 1821 AACTACAAGCAAAATATGTGCTTCAACAGCAATTAATGATTCATGACATAANGAAAGCT 1880
Db 360 LysGlnSerLysAsnMetTyrLeuGlnGlnGlnLeuValHisAlaHisLysLysAla 379
QY 1881 GACACAAAGACGAATAACAAATGATNTTCAATTTCTTTCAGAGGAAATGNC-CATCAT 1939
Db 380 AspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHis 399
QY 1940 CTTCTTAAAGAGAAATAGGAGATATTATTNATTACNATAACCATTTAAAGAAACCGTAT 1999

Db 400 LeuLeuLysGluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIle 419
QY 2000 ATTCAATATGGAAGAAAAAANAAAAA 2027
Db 419 eTyrGlnTyrGluLysGluLysAlaGlu 428
RESULT 13
US-09-433-826B-181
; Sequence 181, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqi
; APPLICANT: Dillon, Devin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.47004
; CURRENT APPLICATION NUMBER: US/09/433,826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-433-826B-181
Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0
US-09-602-362E-15 (1-2030) x US-09-433-826B-181 (1-432)

QY 741 GATACAGTTCAATCTTGTGAAGAGCAAGGAACTTCAAAAAGATCACTGTGAACAAGCT 800
Db 1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY 801 ACAGAAATATGGAACAATACAAAGAGAGTTTGTCTACTGAAAAAGAACTCTCGAA 860
Db 21 ThrGlyLysMetGluGlnMetLysLysPheCysValLeuLysLysLysLeuSerGlu 40
QY 861 GCAAAAGAAATTAATACAGTTCAGAGAACCAAAAGCTTAAATCGGAACAGAGCTCTGC 920
Db 41 AlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGluGlnLeuCys 60
QY 921 ACTGTGAGATTGACTTTTAAACCAAGAGAGAGAGAGAAATGCCGATATTAAT 980
Db 61 SerValArgLeuThrLeuAsnGlnGluGluGlyArgIleGluGlnHisArgLysGluLeuVal 100
QY 981 GAAAAAATTAGCGAAGATTAAGGAAGATCGAAGAGCAGCATAGCAAGAGTGTAGAAGTG 1040
Db 81 GluLysIleArgGluGluLeuGluGlyArgIleGluGlnHisArgLysGluLeuVal 100
QY 1041 AAACAACAACACTTGAACAGGCTCTCAGATACAGATATAGAAATGAAGAGTGTAGAAAGT 1100
Db 101 LysGlnGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLysSerValGluSer 120
QY 1101 AATTTGAATCAGTTCACACTCATGAAATGAATTAATCTTACATGAATATGC 1160
Db 121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
QY 1161 ATGTTGAAAAGAAATTCCTCATGCTTAAACTGGAATAGCCACACTGAAAACCAATAC 1220
Db 141 MetLeuLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160
QY 1221 CAGGAAAGGAATAATAATACCTTTGAGGACATTAAGATTTTAAAGAAAGAAAGCTGTA 1280

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Db      161 GlnGlnLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
Qy      1281 CTTGAGATGACCCCTAAAGCTGAAAGAGCAATCAATTAAGAGGGCATCTCAATATAGT 1340
Db      181 LeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSer 200
Qy      1341 GGGCAGGCTTAAAGTTCTGATAGCTGAGACACAAATGCTCACTTCTAAATGAAGGAAAAA 1400
Db      201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
Qy      1401 CAAGACAAAGAAATACTAGAGGAGAAATGAATCAACCATCTCTAGACTGGCTTCTGCT 1460
Db      221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAla 240
Qy      1461 GTCAAGACCATGATCAAAATGTGACATCAAGAAAAAGTCAAGAACTCTTTCACATT 1520
Db      241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
Qy      1521 GCAGGAGATGCTTGTGTTGCAAGAAAAATGAATGTTGATGTAGTAGTACCGCATATATA 1580
Db      261 AlaGlyAspAlaCysLeuGlnAlaGlyLysMetAsnValAspValSerThrIleTyrAs 280
Qy      1581 CAATGAGTCTCCATCAACCACTTTCTGAAGCTCAAGGAAATCCANAAGCTTAAAAAT 1640
Db      280 nAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysI 300
Qy      1641 TAATCTCAATATGTCAGGAGATGCTCTAAGAGAAATACATGTTGTTTCAGGACATGCAC 1700
Db      300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSerGluHisAlaG 320
Qy      1701 AAGAGACCAACCTGAAACACACAGTGTCAATGAAGGAAGTGAACATGTTTCAANCG 1760
Db      320 InArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnG 340
Qy      1761 AACAGATNATGTGAACAAACACACTGANCAGCAGGAGTCTCTAGATCAGAAATATTTC 1820
Db      340 lueGlnAsnValAsnLysHisThrGluGlnGlnGlnLeuValHisAlaHisLysLysAla 360
Qy      1821 AACTCAAAAGCAAAATATGTGCTTCAACAGCAATTAGTTCATGCACATAAAGAAAGCT 1880
Db      360 lueGlnSerLysAsnMetTyrLeuGlnGlnGlnLeuValHisAlaHisLysLysAla 379
Qy      1881 GACACAAAGCAAGATAACAATGTANTTCATTNTCTTTGAGAGGAAATGCN-CATCAT 1939
Db      380 AspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHis 399
Qy      1940 CTTCTAAAGAGAAAAATGAGGAGATATTNATTACNATAACCATTTAAACCCGATAT 1999
Db      400 LeuLeuLysGluLysAsnGluGluIlePheAsnTyrAsnHisLeuLysAsn-ArgI 419
Qy      2000 ATTTCATATGGAAGAAAAAANAANA 2027
Db      419 eTyrGlnTyrGluLysGluLysAlaGlu 428

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RESULT 14

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US-09-604-287A-181
; Sequence 181, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jjiang, Yuqiu
; APPLICANT: Dillion, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSeq for Windows Version 3.0

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; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-604-287A-181

Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0

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US-09-602-362E-15 (1-2030) x US-09-604-287A-181 (1-432)
Qy      741 CATACAGTTCACTTCTGTGAAAGAGCAAGGAACTTCAAAAAATCATCTGTGAACACGT 800
Db      1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
Qy      801 ACAGAAAAATGGAACAAATGAAAAAGAGTTTGTCTACTGAAAAAGAACTGTCTGAA 860
Db      21 ThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLysLysLeuSerGlu 40
Qy      861 CCAAAAGAAATATAATCACAGTTAGAGAACCAAAAAGTTAAATGGGAAACAAGACTCTGC 920
Db      41 AlalysGluIleLysSerGlnLeuGlnGlnLysValLysTyrGluGlnGluLeuLys 60
Qy      921 AGTGTGAGATTGACTTTAAACCAAGAAAGAGAGAAAGAAATGCCGATATATTAAAT 980
Db      61 SerValArgLeuThrLeuAsnGlnGluGluLysArgArgAsnAlaAspIleLeuAsn 80
Qy      981 GAAAAATAGGGAAGATAGGAAGAAATCGAAGCAGCATAGGAAGAGTTAGAGTG 1040
Db      81 GluLysIleArgGluGluLeuGluArgIleGluGlnHisArgLysGluLeuGluVal 100
Qy      1041 AAACAACAACCTTGAAAGGCTCTCAGAAATACAGATATAGAAATGAGAGTGTAGAAAGT 1100
Db      101 LysGlnGlnLeuGluGlnAlaLeuArgIleGlnAspIleGluLeuLysSerValGluSer 120
Qy      1101 AATTGATCAGGTTCTCAGACTCATGAAATGAAATATCTCTTACATGAAATTC 1160
Db      121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
Qy      1161 ATGTTGAAAAAGGAAATGCGCATGCTAAACTGGAATAGCCACACTGAAACCAATAC 1220
Db      141 MetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160
Qy      1221 CAGAAAAAGAAATAATAATCTTTGAGACATTAAGATTTTAAAGAAAGATGCTGAA 1280
Db      161 GlnGlnLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
Qy      1281 CTTGAGATGACCCCTAAACCTGAAAGAGGAAATCAATCACTAAAGGGCATCTCAATATAGT 1340
Db      181 LeuGlnMetThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSer 200
Qy      1341 GGGCAGGCTTAAAGTTCTGATAGCTGAGACACAAATGCTCACTTCTTAAATGAAGGAAAAA 1400
Db      201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
Qy      1401 CAAGACAAAGAAATACTAGAGGAGAAATGAATCAACCATCTCTAGACTGGCTTCTGCT 1460
Db      221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAla 240
Qy      1461 GTCAAGACCATGATCAAAATGTGACATCAAGAAAAAGTCAAGAACTCTTTCACATT 1520
Db      241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
Qy      1521 GCAGGAGATGCTTGTGTTGCAAGAAAAATGAATGTTGATGTAGTAGTACCGCATATATA 1580
Db      261 AlaGlyAspAlaCysLeuGlnAlaGlyLysMetAsnValAspValSerThrIleTyrAs 280
Qy      1581 CAATGAGTCTCCATCAACCACTTTCTGAAGCTCAAGGAAATCCANAAGCTTAAAAAT 1640

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Db      280 nAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysLeuLysI1 300
QY      1641 TAATCTCAATATTGAGGAGATGCTTAAAGAGAAATACATTGGTTTCAGGAACATGCAC 1700
Db      300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaG 320
QY      1701 AAAGAGACCAAGCTGAAACACAGTGTCAATGAAGAGAGCTGAACACATGNTCAAANCG 1760
Db      320 InArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnG 340
QY      1761 AACAGATNATGTGAACAAACACATGANCACAGAGCTCTAGATCAGAAATATTTC 1820
Db      340 InGlnAspAsnValAsnLysHisThrGlnGlnGlnSerLeuAspGlnLysLeuPheG 360
QY      1821 AACTCAAAAGCAAAATATGTGGCTTCAACAGCAATATTGTTTCATGCACATAAAGAAAGCT 1880
Db      360 InLeuGlnSerLysAsnMetTyrLeuGlnGlnGlnLeuValHisAlaHis-LysLysAla 379
QY      1881 GACACAAAGCAAGATCAATTCATTTGATTTCTTTCAGAGGAAATGCN-CATCAT 1939
Db      380 AspAsnLysSerLysLysLeuThrLeuAspLysPheLeuGluArgLysMetGlnHisHis 399
QY      1940 CTTCTAAAAGAGCAAAATGAGGAGATATTNNATTACNATAACCATTTAAAAACCCGCTAT 1999
Db      400 LeuLeuLysGluLysAsnGluGluLeuPheAsnTyrAsnAsnHisLeuLysAsn-ArgI1 419

RESULT 15
US-09-285-480-181
; Sequence 181 Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-285-480-181

Alignment Scores:
Pred. No.: 1,178-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.0% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0

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QY      741 GATACAGTTCATCTTGTGTAAGAGCAAGGGAACCTTCAAAAGATCACTGTGAACAAAGCT 800
Db      1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY      801 ACAGAGAAAATGGAAACAATGAAAGAAGTTTGTGTACTGAAAAGAGAACTGTCTGAA 860
Db      21 ThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLysLysLeuSerGlu 40
QY      861 GCAAAAGAAATAATCACTAGTGAAGAACCAAAAGTTAAATGGGAACAGAGCTCTGCG 920
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Db      41 AlalysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlnGluLeuCys 60
QY      921 AGTCTGAGATTGACTTTTAAACCAAGAGAGAGAGAGAGAAATCCGATATATTAAT 980
Db      61 SerValArgLeuThrLeuAsnGlnGluGluGluLysArgArgAsnAlaAspIleLeuAsn 80
QY      981 GAAAAAATAGGGAAGAATTTAGGAAGAATCGAAGAGCAGCATAGGAAGAGTTAGAAAGT 1040
Db      81 GlulysIleArgGluLeuGluLysArgIleGluGluGlnHisArgLysGluLeuGluVal 100
QY      1041 AAACAACAACCTTGACAGGCTCTCAGNATACAGATATAGAAATGAAGAGTGTAGAAAGT 1100
Db      101 LysGlnGlnLeuGlnAlaLeuArgIleGlnAspIleGlnLeuLysSerValGluSer 120
QY      1101 AATTGTAATCAGGTTTCTCACACTCATGAAAAATGAAAAATTTCTTACATGAAAAATTGC 1160
Db      121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCys 140
QY      1161 ATGTTGAAAAAGAAATTCGCTGCTTAAACTGGAATAGCCACACTGAAACCCAAATAC 1220
Db      141 MetLeuLysLysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyr 160
QY      1221 CAGGAAAAGGAAAATMAATACTTTGAGGACATTAAAGATTTTAAAGAAAAAGAAATGCTGAA 1280
Db      161 GlnGluLysGluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
QY      1281 CTTCAGATGACCTTAAACTGAAAGAGGAATCAATTAACCTAAAAAGGGCATCTCAATATAGT 1340
Db      181 LeuGlnMetThrLeuLysLeuLysGluLysSerLeuThrLysArgAlaSerGlnTyrSer 200
QY      1341 GGGCAGCTTAAAGTTCTGATAGCTGAGACACAACTGCTCACTTCTAAATGAAGGAAAAA 1400
Db      201 GlyGlnLeuLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLys 220
QY      1401 CAACACAAGAAATACTAGAGGAGAAATGAATCAACACCATCTAGACTGGTCTTCTGCT 1460
Db      221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAla 240
QY      1461 GTACAGACCATCATCAATTTGTGACATCAAGAAAANGTCAAGAACTGCTGTTTCCACATT 1520
Db      241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
QY      1521 GCAGGAGATCTTGTGTTTCAAGAAAAAATGAATGTTGATGTAGTAGTAGTACCGATATATA 1580
Db      261 AlaGlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrAs 280
QY      1581 CAATGAGCTCTCCATCAACCACTTTCTGAAGCTCAAGAAATCCANAGCTCAAAAT 1640
Db      280 nAsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysI1 300
QY      1641 TAATCTCAATTTGACAGGAGATGCTCTTAAGAGAAAAATACATTTGGTTTTCAGGAACATGCAC 1700
Db      300 eAsnLeuAsnTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaG 320
QY      1701 AAAGAGACCAAGCTGAAACACAGTGTCAAATGAAGAAAGCTGAACACATGNTCAAANCG 1760
Db      320 InArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnG 340
QY      1761 AACAGATNATGTGAACAAACACATGANCACAGAGCTCTCTAGATCAGAAATATTTC 1820
Db      340 InGlnAspAsnValAsnLysHisThrGlnGlnGlnSerLeuAspGlnLysLeuPheG 360
QY      1821 AACTCAAAAGCAAAATATGTGGCTTCAACAGCAATATTGTTTCATGCACATAAAGAAAGCT 1880
Db      360 InLeuGlnSerLysAsnMetTyrLeuGlnGlnGlnLeuValHisAlaHis-LysLysAla 379
QY      1881 GACACAAAGCAAGATCAATTCATTTGATTTCTTTCAGAGGAAATGCN-CATCAT 1939
Db      380 AspAsnLysSerLysLysLeuThrLeuAspLysPheLeuGluArgLysMetGlnHisHis 399
QY      1940 CTTCTAAAAGAGCAAAATGAGGAGATATTNNATTACNATAACCATTTAAAAACCCGCTAT 1999
Db      400 LeuLeuLysGluLysAsnGluGluLeuPheAsnTyrAsnAsnHisLeuLysAsn-ArgI1 419
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QY 2000 ATTTCATATGGAAGAAAAAANAANA 2027
Db 419 eTyGlnTyGluLysGluLysAlaGlu 428
RESULT 16
US-09-834-759-181
; Sequence 181, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 181
; LENGTH: 432
; TYPE: PRN
; ORGANISM: Homo sapien
US-09-834-759-181
Alignment Scores:
Pred. No.: 1,17e-182 Length: 432
Score: 2017.00 Matches: 412
Percent Similarity: 96.06% Conservative: 3
Best Local Similarity: 95.37% Mismatches: 13
Query Match: 59.27% Indels: 5
DB: 4 Gaps: 0
US-09-602-362B-15 (1-2030) x US-09-834-759-181 (1-432)
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Db 1 AspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHisCysGluGlnArg 20
QY 801 ACAGGAAATGCAACAATGAAAGAACTTTGCTACTGAAAGAACTGTCAGAA 860
Db 21 ThrGlyLeuMetGluGlnMetLysLysPheCysValLeuLysLysLeuSerGlu 40
QY 861 GCAAGAAATGAAATACACAGTTAGAGAACCAAAAGTTAAATGGCAACAGCTCTGC 920
Db 41 AlaLysGluLeuLysSerGlnLeuGluAsnGlnLysValLysTrpGluGlnGluLeuCys 60
QY 921 AGTGTGAGATTGATTTAAACCAAGAGAGAGAGAGAGAAATGCCGATATTAAT 980
Db 61 SerValArgLeuThrLeuAsnGlnGluGluLysArgAsnAlaAspLeuLeuAsn 80
QY 981 GAAAAAATAGGGAAGATTTAGGAAGATCGAAGAGCAGATAGGAAGATTTAGAGTG 1040
Db 81 GluLysLeuArgGluGluLeuGlyArgGluGluGlnHisArgLysGluLeuGluVal 100
QY 1041 AACAACAATGGAAGCTCTCAGAAATACAGATATAGAAATGAGAGTGTAGAAAGT 1100
Db 101 LysGlnGlnLeuGluGlnAlaLeuArgGluGlnAspGluLeuLysSerValGluSer 120
QY 1101 AATTGAATCAGGTTCTTCACTCATGAAATGAAATTTACTCTTACATGAAATTCG 1160
Db 121 AsnLeuAsnGlnValSerHisThrHisGluAsnGluAsnTyrlLeuLeuHisGluAsnCys 140
QY 1161 ATGTTGAAAGAAATTTGCCATGCTTAAACTGGAATAGCCCACTGAAACCACTATC 1220
Db 141 MetLeuLysLysGluLeuAlaMetLeuLysLeuGluLeuAlaThrLeuLysHisGlnTyrl 160
QY 1221 CAGGAAAGGAAATTAATACTTTGAGCATTAAAGATTTTAAAGAAAAAGAAATGCTGAA 1280

Db 161 GlnGluLysGluAsnLysTyrlPheGluAspIleLysIleLeuLysGluLysAsnAlaGlu 180
QY 1281 CTTCAAGATGACCTTAAACCTGAAAGAGGAATCAATTAACATAAGGGCATCTCAATATAGT 1340
Db 181 LeuGlnMetThrLeuLysLysLysGluGluSerLeuThrLysArgAlaSerGlnTyrlSer 200
QY 1341 GGGCAGCTTAAAGTTCTGATAGCTGAGAACACAAATGCTCACTTCTTAATGAGGAAAA 1400
Db 201 GlyGlnLysValLeuIleAlaGluAsnThrMetLeuThrSerLysLysLysGluLys 220
QY 1401 CAGACAAAGAAATCTAGAGGCGAGAAATGATACACATCTAGACTGCTGCTTCTGCT 1460
Db 221 GlnAspLysGluIleLeuGluAlaGluIleGluSerHisProArgLeuAlaSerAla 240
QY 1461 GTACAGACCATGATCAAAATTTGTACATCAAGAAAAAGTCAAGAACTCTCTTCCACTT 1520
Db 241 ValGlnAspHisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIle 260
QY 1521 GCAGGATGCTTGTTCGAAAGAAATCAATGTTGATGTAGTAGTACCGATATATA 1580
Db 261 AladlyAspAlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrlAs 280
QY 1581 CAATGAGTCTCTCATCAACCACTTTCTGAAGCTCAAGGAAATCCANAAGCCTTAAAT 1640
Db 280 AsnGluValLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLys 300
QY 1641 TAATCTCAATATGCGAGGATGCTCTAAGAGAAATACATTTGTTTCAGGACATGCAC 1700
Db 300 eAsnLeuAsnTyrlAladlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaG 320
QY 1701 AAAGAGACCAAGTGAACACAGTGTCAATGAAGAGCTGAACACATGTTTCAANOG 1760
Db 320 LnaArgAspGlnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrlGlnAsnG 340
QY 1761 AACAGATNATGTGAACAAACACACATGANCAGCAGGAGTCTCTAGATCAGAAATTTATTC 1820
Db 340 LuGlnAspAsnValAsnLysHisThrGluGlnGlnGluSerLeuAspGlnLysLeuPheG 360
QY 1821 AACTTACAAACCAAAATATCTGCTTCAACAGCAATTAGTTTCATGCACATTAAGAAAGCT 1880
Db 360 LnuGlnSerLysAsnMetTrpLeuGlnGlnGlnLeuValHisAlaHis-LysLysAla 379
QY 1881 GACAACAAAGCAAGATTAACAATTTGATTTTCATTTCTTGAGAGGAAATGCN-CATCAT 1939
Db 380 AspAsnLysSerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHis 399
QY 1940 CTTCTTAAAGAGAAATGAGGAGATTTTATTTATGATTAACCATTTAAACCCGAT 1999
Db 400 LeuLeuLysGluLysAsnGluIlePheAsnTyrlAsnAsnHisLeuLysAsn-ArgIle 419
QY 2000 ATTTCAATATGGAAGAAAAAANAANA 2027
Db 419 eTyrlGlnTyrlGluLysGluLysAlaGlu 428

RESULT 17
US-09-620-405B-469
; Sequence 469, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0

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/ SEQ ID NO 469
/ LENGTH: 650
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: VARIANT
/ LOCATION: (1)...(650)
/ OTHER INFORMATION: Xaa = Any Amino Acid
US-09-620-405B-469

Alignment Scores:
Pred. No.: 7,11e-143 Length: 650
Score: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservatives: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1

US-09-602-362E-15 (1-2030) x US-09-620-405B-469 (1-650)

QY 9 GTTAAAGATGGTCTCTGAGGCTAACTCGGAATGAAGTTCTATTCCAACTAAAGCC 68
Db 327 VallyAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 346
QY 69 TTAGAAATGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAAGCCATCTGCCTTC 128
Db 347 LeuGluLeuMetAspMetGlnThrPhenylsAlaGluProGluLysProSerAlaPhe 366
QY 129 GAGCCTGCATTAAGTCAAAAGTCTGTTCCAAATAAAGCTTGAATGAAGATGAA 188
Db 367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAACATTGAGACGATGAGTATCCCATCAGATCCAAACAAAGAGCTTGAAGAA 248
Db 387 GlnThrLeuArgAlaAspGluLeuProSerGluSerLysGlnLysAspPyrGluGlu 406
QY 249 AGTCTTGGGATCTGAGAGTCTCTGTGAGAGTGTTCACAGAAGGATGTGTGTTACCC 308
Db 407 SerSerTrpAspSerGluSerLeuGluThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGGTACACATCAAAAGAAATAGATAAATAATGAAGAAATTAAGAGTCTCTGAT 368
Db 427 LysAla***HisGlnLysGluLeuAspLysIleAsnGlyLysLeuGluGluSerProasp 446
QY 369 AATGATGGTTTCTGAAGGCTCCCTGCAGATGAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466
QY 429 GAATTGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAAGCCATCTGCCTTCGAG 488
Db 467 GluLeuMetAspMetGlnThrPhenylsAlaGluProGluLysProSerAlaPheGlu 486
QY 489 CCGTCATTGAATGCAAAAGTCTGTTCCAAATAAAGCTTGAATGAAGAAATGAACAA 548
Db 487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGACGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGTTGAAGAAAT 608
Db 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 526
QY 609 TCTTGGGATCTGAGAGTCTCGTGAGAGTGTTCACAGAAGGATCTGTGTCACCAAG 668
Db 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GGTACACATCAAAAGAAATGATATAAATAGTGGAAATTAGAAGATTCAACTAGCCTA 728
Db 547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAAAATCTTGATACAGTTCATCTGTGTGAAGAGCAGAGGAACTTCAAAAGATCAC 788
Db 567 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACACGTACAGGAAAAATGCAACAAATCAAAAAAGAGTTTTGTGTACTGAAAAAG 848
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Db 587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 606
QY 849 AAACGTGTCAAGACCAAAAGAAATAAATACAGTTAGAGAACCAAAAGTTAAATGGAA 908
Db 607 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGlnAsnGlnLysValLysTrpGlu 626
QY 909 CAAGAGCTCTCAGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAGAGAAATGCC 968
Db 627 GlnGluLeuCysSerVal----- 632
QY 969 GATATATTAAATGAAAAAATTAGGAGAGATTAGGAAGATCGAAGAGCAGCATAGGAAA 1028
Db 632 ----- 632
QY 1029 GAGTTAGAGTGAACAAACAACTTGAACAGGCTCTCAGATACAGATATAGAATTGAAG 1088
Db 632 ----- 632
QY 1089 AGTGTAGAAAGTAATTGTAATCAGGTTTCTCACACTCATGAAAATGAAAATTTCTCTTA 1148
Db 633 -----Arg-PheLeuThrLeuMetLysMetLysIleIleSerTy 645
QY 1149 CATGAAAATTCGATGT 1164
Db 645 rMetLysIleAlaCys 650

RESULT 18
US-09-433-826B-469
; Sequence 469, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqi
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.47004
; CURRENT APPLICATION NUMBER: US/09/433,826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 469
; LENGTH: 650
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (310)
; NAME/KEY: Xaa = Any Amino Acid<221> unsure
; LOCATION: (429)
; NAME/KEY: Xaa = Any Amino Acid<221> unsure
; LOCATION: (522)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-433-826B-469

Alignment Scores:
Pred. No.: 7,11e-143 Length: 650
Score: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservatives: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1

US-09-602-362E-15 (1-2030) x US-09-433-826B-469 (1-650)

QY 9 GTTAAAGATGGTCTCTGAGGCTAACTCGGAATGAAGTTCTATTCCAACTAAAGCC 68
Db 327 VallyAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 346
QY 69 TTAGAAATGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAAGCCATCTGCCTTC 128
Db 347 LeuGluLeuMetAspMetGlnThrPhenylsAlaGluProGluLysProSerAlaPhe 366
QY 129 GAGCCTGCATTAAGTCAAAAGTCTGTTCCAAATAAAGCTTGAATGAAGATGAA 188
Db 367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAACATTGAGACGATGAGTATCCCATCAGATCCAAACAAAGAGCTTGAAGAA 248
Db 387 GlnThrLeuArgAlaAspGluLeuProSerGluSerLysGlnLysAspPyrGluGlu 406
QY 249 AGTCTTGGGATCTGAGAGTCTCTGTGAGAGTGTTCACAGAAGGATGTGTGTTACCC 308
Db 407 SerSerTrpAspSerGluSerLeuGluThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGGTACACATCAAAAGAAATAGATAAATAATGAAGAAATTAAGAGTCTCTGAT 368
Db 427 LysAla***HisGlnLysGluLeuAspLysIleAsnGlyLysLeuGluGluSerProasp 446
QY 369 AATGATGGTTTCTGAAGGCTCCCTGCAGATGAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466
QY 429 GAATTGATGACATGCAAACTTTCAAGCAGAGCCTCCGAGAAGCCATCTGCCTTCGAG 488
Db 467 GluLeuMetAspMetGlnThrPhenylsAlaGluProGluLysProSerAlaPheGlu 486
QY 489 CCGTCATTGAATGCAAAAGTCTGTTCCAAATAAAGCTTGAATGAAGAAATGAACAA 548
Db 487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGACGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGTTGAAGAAAT 608
Db 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 526
QY 609 TCTTGGGATCTGAGAGTCTCGTGAGAGTGTTCACAGAAGGATCTGTGTCACCAAG 668
Db 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GGTACACATCAAAAGAAATGATATAAATAGTGGAAATTAGAAGATTCAACTAGCCTA 728
Db 547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAAAATCTTGATACAGTTCATCTGTGTGAAGAGCAGAGGAACTTCAAAAGATCAC 788
Db 567 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACACGTACAGGAAAAATGCAACAAATCAAAAAAGAGTTTTGTGTACTGAAAAAG 848
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Db 347 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 366
QY 129 GAGCTGCCATTGAATGCAAAAGTCTGTCCAAATAGAGCTTGGAAATGAAGATGAA 188
Db 367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAAACATTGAGACAGACATGATACCTCCATCAGATCCAAACAAAGAGACTATCAAGAA 248
Db 387 GlnThrLeuArgAlaAspGluLeuProSerGluSerLysGlnLysAspTyrGluGlu 406
QY 249 AGTCTTGGATTCTGAGAGTCTCTGTGAGACTGTTTTCACAGAGAGTGTGTTTACCC 308
Db 407 SerSerTrpAspSerGluSerLysGlnThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGGCTACATCAAAAGAAATAGATAAAATGGAATGGAATTAAGAGAGTCTCTGAT 368
Db 427 LysAla**HisGlnLysGluLeuAspLysIleAsnGlyLysLeuGluGluSerProAsp 446
QY 369 AATGATGTTTCTGAGGCTCCCTGCAGAAATCAAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466
QY 429 GAATTCATGACATGCAAACTTCAAGCAGAGCTCCCGAGAGCCATCTGCCTTCGAG 488
Db 467 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 486
QY 489 CTGCTCCATTGAATGCAAAAGTCTGTCCAAATGAAAGCTTGGAAATGAAGATGAACAA 548
Db 487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGACAGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGGTTGAGAAAT 608
Db 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys**ValGluGluAsn 526
QY 609 TCTTGGATTCTGAGAGTCTCCGTGAGACTGTTCACAGAGAGTGTGTGTACCCCAAG 668
Db 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GCTACATCAAAAGAAATGGAATAAATAGTGGAAATTAGAGATTCACATGAGCTTA 728
Db 547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAAAATCTTGATCAGTCTCATCTCTGTGAAAGCAAGGAACTTCCAAAGATCAC 788
Db 567 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACACGTACAGGAAATGGAACAAATGAAAGAGATTTGTGTACTGAAAG 848
Db 587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysIys 606
QY 849 ARACTTCAGACCAAAAGAAATTAATCAGAGTACAGACCAAAAGTAAATGGGAA 908
Db 607 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 626
QY 909 CAAGAGCTTCGAGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAGAGAAATGCC 968
Db 627 GlnGluLeuCysSerVal 632
QY 969 GATATATTAAATGAAAAATTAGGAGAAATTAGGAGAAATCGAAGACAGCATAGGAA 1028
Db 632 632
QY 1029 GAGTTAGAGTGAACAACTTGAAACAGGCTCTCAGAAATACAGATATAGATTGAAG 1088
Db 632 632
QY 1089 AGTGTAAGAGTAATTTGAATCAGGTTTCTCACATCTCATGAAATGAAATATCTCTTA 1148
Db 633 633
QY 1149 CATGAAATTCATGT 1164

Db 645 rMetLysIleAlaCys 650
RESULT 19
US-09-604-287A-469
; Sequence 469, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillion, Devin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604, 287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 469
; LENGTH: 650
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (310)
; OTHER INFORMATION: Xaa = Any Amino Acid
; NAME/KEY: unsure
; LOCATION: (429)
; OTHER INFORMATION: Xaa = Any Amino Acid
; NAME/KEY: unsure
; LOCATION: (522)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-604-287A-469
Alignment Scores:
Pred No.: 7,11e-143 Length: 650
Scores: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservative: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1
US-09-602-362E-15 (1-2030) x US-09-604-287A-469 (1-650)
QY 9 GTTAAAGATGCTCTCTGAAGGCTAACTCGGAATGAAAGTTTCTATTCCAACTAAAGCC 68
Db 327 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 346
QY 69 TTGAATTTGATGGACATGCAAACTTTCAAAGCAGAGCTCCCGAGAGCCATCTGCCTTC 128
Db 347 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 366
QY 129 GAGCTCCCATTTGAATGCAAAAGTCTGTTCMAAATAAGCCCTTGAATGAAGATGAA 188
Db 367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAAACATTGAGACAGATGAGATACCTCCATCAGATCCAAACAAAGAGACTATGAAGAA 248
Db 387 GlnThrLeuArgAlaAspGluLeuProSerGluSerLysGlnLysAspTyrGluGlu 406
QY 249 AGTCTTGGATTCTGAGAGTCTCTGTGAGACTGTTTTCACAGAGAGTGTGTTTACCC 308
Db 407 SerSerTrpAspSerGluSerLysGlnThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGGCTACATCAAAAGAAATAGATAAAATGGAATGGAATTAAGAGAGTCTCTGAT 368
Db 427 LysAla**HisGlnLysGluLeuAspLysIleAsnGlyLysLeuGluGluSerProAsp 446
QY 369 AATGATGTTTCTGAGGCTCCCTGCAGAAATCAAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466

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QY 429 GAATTGATGACATGCAAACTTCAAGCAGAGGCTCCGAGAGCCATCTGCCTTCGAG 488
Db 467 GluLeuMetAspMetGlnThrPhelysAlaGluProPogluLysProSerAlaPheGlu 486
QY 489 CTGTCATTGAAATCAAAAGTCTGTTCAATAAAGCTTGGAAATCAAGAATGAACAA 548
Db 487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGCAGATCAGATGTTCCCTTCAGATCAAAACAAAGAGGTTGAGAAAT 608
Db 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys**ValGluGluAsn 526
QY 609 TCTTGGGATTCGAGAGTCTCGTTCAGAGCTGTTTCACAGAGGAGTGTGTGTACCCCAAG 668
Db 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GCTACACATCAAAAGAAATGGAATAAATAGTGAAGAAATAGAGATTCACACTAGCCTA 728
Db 547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
QY 729 TCAGAAATCTTGATACAGTTCATCTTCTGAAAGCAGCAAGGAACTTCAAAAGATCAC 788
Db 567 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 586
QY 789 TGTGAACAACGTACAGGAAATGGAACAAATGAAAGAAAGTGTGTGTACTGAAAGAG 848
Db 587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 606
QY 849 AACTGTGAGAGCAAGAAATAAATCAAGTTAGAGAACCAAAAGTTAAATGGAA 908
Db 607 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 626
QY 909 CAAGAGCTCTGAGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAGAAATGCC 968
Db 627 GlnGluLeuCysSerVal----- 632
QY 969 GATATATTAAATGAAAAATTAGGAGAAATTAGGAGAAATCGAAGACAGCATAGGAAA 1028
Db 632 ----- 632
QY 1029 GAGTTAGAAGTGAACAACTTGAACAGGCTCTCAGATACAGATATAGATTGAG 1088
Db 632 ----- 632
QY 1089 AGTGTAGAAAGTAATTGAATCAGGTTTCTCACACTCATGAAATGAAATTAATCTCTTA 1148
Db 633 -----Arg-PheLeuThrLeuMetLysMetLysIleIleSerTy 645
QY 1149 CATGAAATTCATGT 1164
Db 645 rMetLysIleAlaCys 650

RESULT 20
US-09-834-759-469
; Sequence 469, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuxiu
; APPLICANT: Dillon, David C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 469
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LENGTH: 650
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: unsure
LOCATION: (310)
OTHER INFORMATION: Xaa = Any Amino Acid
NAME/KEY: unsure
LOCATION: (429)
OTHER INFORMATION: Xaa = Any Amino Acid
NAME/KEY: unsure
LOCATION: (522)
OTHER INFORMATION: Xaa = Any Amino Acid
US-09-834-759-469

Alignment Scores:
Pred. No.: 7,11e-143 Length: 650
Score: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservative: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1
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US-09-602-362B-15 (1-2030) X US-09-834-759-469 (1-650)
QY 9 GTTAAAGATGCTCTTCTGAGGCTAACTGCGAATGAAAGTTTCTATTCCAACTAAAGCC 68
Db 327 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 346
QY 69 TTGAATTTGATGACATGCAAACTTTCAAGCAGAGCCCTCCGAGAGCCATCTGCCTTC 128
Db 347 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPhe 366
QY 129 GAGCCTGCCATTCAAAATGCAAAAGTCTGTTCACAAATAAAGCCTTGAATGAAAGATGAA 188
Db 367 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 386
QY 189 CAAACATTTGAGACAGATGATATCTCCATCAGATTCACAAACAAAGGCTATGAGAA 248
Db 387 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTyTrpGlu 406
QY 249 AGTTCTTGGATTTCTGAGAGTCTCTGAGACTGTTTACAGAGAGGATGTGTGTACCC 308
Db 407 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 426
QY 309 AAGCTACACATCAAAAGAAATAGATAAATAATGAAATGAAATAGAGAGTCTCTGAT 368
Db 427 LysAla**HisGlnLysGluIleAspLysIleAsnGlyLysLeuGluSerProAsp 446
QY 369 AATGATGTTTCTGAGAGCTCCCTGAGATGAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 447 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 466
QY 429 GAATTGATGACATGCAAACTTTCAAGCAGAGCCCTCCGAGAGCCATCTGCCTTCGAG 488
Db 467 GluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPheGlu 486
QY 489 CTGTCATTGAAATGCAAAAGTCTGTTCAATAAAGCTTGGAAATGAGATGAAACAA 548
Db 487 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 506
QY 549 ACATTGAGCAGATCAGATGTTCCCTTCAGATCAAAACAAAGAGGTTGAGAAAT 608
Db 507 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys**ValGluGluAsn 526
QY 609 TCTTGGGATTCGAGAGTCTCGTTCAGAGCTGTTTTCACAGAGGATGTGTGTACCCCAAG 668
Db 527 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 546
QY 669 GCTACACATCAAAAGAAATGGAATAAATAGTGAAGAAATAGAGATTCACACTAGCCTA 728
Db 547 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 566
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QY 729 TCAAAATCTTGATACAGTCTCATTTCTGTAAGAGCAAGGAACTTCAAAAGCATCAC 788
Db 567 SerLysileLeuAspThrValHisSerCysGluA-galaarGluLeuGlnLysAspHis 586
QY 789 TGTGAACAACTGACAGGAAAAATGGAACAAATGAAAAAGAACTTTTGTGTACTGAAAAAG 848
Db 587 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysPheCysValLeuLysLys 606
QY 849 AAATCTGACAGCAAGAAATATAATCACAGTAGAGCAACCAAAAGTTAAATGGGAA 908
Db 607 LysLeuSerGluAlaLysGluLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 626
QY 909 CAAGAGCTCTGCACTGTGAGATTGACTTTAAACCAAGAGAGAGAGAAATGCC 968
Db 627 GlnGluLeuCysSerVal----- 632
QY 969 GATATATTAATGAAAAAATTAGGGAAGAAATTAGGAAGAAATCGAAGAGCATAGGAAA 1028
Db 632 ----- 632
QY 1029 GAGTTAGAGTGAACAACAACCTTGAAACAGGCTCTCAGAAATACAAGATATAGAAATTGAAG 1088
Db 632 ----- 632
QY 1089 AGTGTAGAAAGTAATTGAATCAGGTTTCTCACACTCATGAAAAATGAAAAATTCCTTTA 1148
Db 633 -----Arg-PheLeuThrLeuMetLysMetLysIleIleSerTy 645
QY 1149 CATGAAATTCATGT 1164
Db 645 rMetLysIleAlaCys 650

RESULT 21
US-09-620-405B-494
; Sequence 494, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 494
; LENGTH: 743
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: variant
; LOCATION: (1)..(743)
; OTHER INFORMATION: Xaa = Any amino acid
US-09-620-405B-494

Alignment Scores:
Pred. No.: 7,44e-143 Length: 743
Score: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservative: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1

US-09-602-362E-15 (1-2030) x US-09-620-405B-494 (1-743)
QY 9 GTTAAAGATGGTCTCTGAGGCTACTCGGAATGAAGTTTCTATTCCTCAACTAAAGCC 68
Db 420 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleLeuProThrLysAla 439

QY 69 TTGAATTTGATGACATGCAAACTTTCAAGACAGAGCCTCCGAGAGCAATCTGCCTTC 128
Db 440 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPhe 459
QY 129 GAGCTGCCATTGAAATGCAAAAGTCTGTTTCCAAATAAAGCCCTTGAATGGAATGAA 188
Db 460 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGlu 479
QY 189 CAAACATGAGACAGATGAGATCTCCCATCAGATCCAAACAAAGGACATATGAGAA 248
Db 480 GlnThrLeuArgAlaAspGluIleLeuProSerGluSerLysGlnLysAspTrpGluGlu 499
QY 249 AGTCTTGGGATCTGAGAGTCTCTGTGAGACTGTGTTTCCAGAAAGATGTGTTTACC 308
Db 500 SerSerTrpAspSerGluSerLeuCysGluThrValSerGlnLysAspValCysLeuPro 519
QY 309 AGGCTACACATCAAAAGAAATAGATATAAATAAATGAAATGAAATGAGAGTCTCCTGAT 368
Db 520 LysAla***HisGlnLysGluIleAspLysIleAsnGlyLysLeuGluSerProAsp 539
QY 369 AATGATGCTTTTCTGAGGCTCCCTGCAGATGAAAGTTTCTATTCCAACTAAAGCCTTA 428
Db 540 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 559
QY 429 GAATTTGATGACATGCAAACTTTCAAAGCAGAGCCTCCGAGAGCAATCTGCCTTCGAG 488
Db 560 GluLeuMetAspMetGlnThrPheLysAlaGluProGluLysProSerAlaPheGlu 579
QY 489 CTTGCCATTTGAAATGCAAAAGTCTGTTTCCAAATAAAGCCTTGAATGGAATGAAACA 548
Db 580 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 599
QY 549 ACATTTGAGACAGATCAGATGTTTCCCTTCCAGATCAAAACAAAGAGGTTCGAAGAAAT 608
Db 600 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 619
QY 609 TCTTGGGATTTGAGAGTCTCCGTGAGACTGTTTTCAGAGAGGATGTGTGTACCCAG 668
Db 620 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 639
QY 669 GCTACACATCAAAAGAAATGGAATAAATAAGTGAATAATGAGAGTTCAGAGTCACTAGCCTA 728
Db 640 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 659
QY 729 TCAAAATCTTGATACAGTCTCATTTCTGTAAGAGCAAGGAACTTCAAAAGATCAC 788
Db 660 SerLysileLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 679
QY 789 TGTGAACAACGTACAGGAAAAATGGAACAAATCAAAAGAAAGTTTGTGTACTGAAAAAG 848
Db 680 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysPheCysValLeuLysLys 699
QY 849 AAATCTGACAGCAAGAAATATAATCACAGTTAGAGAACCAAAAGTTAAATGGGAA 908
Db 700 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 719
QY 909 CAAGAGCTCTGAGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAAATGCC 968
Db 720 GlnGluLeuCysSerVal----- 725
QY 969 GATATATTAATGAAAAAATTAGGGAAGAAATTAGGAAGAAATCGAAGAGCATAGGAAA 1028
Db 725 ----- 725
QY 1029 GAGTTAGAGTGAACAACAACCTTGAAACAGGCTCTCAGAAATACAAGATATAGAAATTGAAG 1088
Db 725 ----- 725
QY 1089 AGTGTAGAAAGTAATTGGAATCAGGTTTCTCACACTCATGAAAAATGAAAAATTCCTTTA 1148
Db 726 -----Arg-PheLeuThrLeuMetLysMetLysIleIleSerTy 738

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QY 1149 CATGAAAATTGCATGT 1164
Db 738 rMetLysIleAlaCys 743

RESULT 22
US-09-834-759-494
; Sequence 494, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuguu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 494
; LENGTH: 743
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: variant
; LOCATION: (1)...(743)
; OTHER INFORMATION: Xaa = Any amino acid
US-09-834-759-494

Alignment Scores:
Pred. No.: 7,44e-143 Length: 743
Score: 1597.50 Matches: 321
Percent Similarity: 83.42% Conservative: 1
Best Local Similarity: 83.16% Mismatches: 2
Query Match: 46.94% Indels: 62
DB: 4 Gaps: 1

US-09-602-362E-15 (1-2030) x US-09-834-759-494 (1-743)
QY 9 GTTAAGATGCTTCTGAGGCTAACTCGGAAGTAAAGTTCTATTCCAACTAAAGCC 68
Db 420 ValLysAspGlyLeuLeuLysAlaAsnCysGlyMetLysValSerIleProThrLysAla 439
QY 69 TTAGAAATTCAGCATGCAAACTTTCAAAGCAGAGCCTCCGAGAAGCCATCGCCTTC 128
Db 440 LeuGluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerIlePhe 459
QY 129 GAGCTGCTGCAATGAAATGCAAAAGTCTGTTCCAAATAAAGCCTTGAAATTGAAGATCAA 188
Db 460 GluProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLysAsnGlu 479
QY 189 CAAACATTCAGAGCAGATGAGATCTCCATCAGAAATCCAAACAAAGGACTATGAGAA 248
Db 480 GlnThrLeuArgAlaAspGluLeuLeuProSerGluSerLysGlnLysAspTyrGluGlu 499
QY 249 AGTCTCTGGCAATCTGAGAGTCTCTGTGAGACTGTTTCCACAGAAGGATGTGTGTTACCC 308
Db 500 SerSerTrpAspSerGluSerLeuLysGluThrValSerGlnLysAspValCysLeuPro 519
QY 309 AAGGCTACATCAAAAGAAATAGTAAATAAATGGAATAGAAATGAGAGTCTCCTGAT 368
Db 520 LysAla***HisGlnLysGluLeuAspLysIleAsnGlyLysLeuGluGluSerProAsp 539
QY 369 AATGATGGTTTCTGAAGCTCCCTGCAGATGAAAGTTTCTATTCCAACTAAAGCCCTTA 428
Db 540 AsnAspGlyPheLeuLysAlaProCysArgMetLysValSerIleProThrLysAlaLeu 559
QY 429 GAATGTAGCATGCAAACTTTCAAAGCAGAGCCTCCGAGAAGCCATCTCGCTTCAG 488
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Db 560 GluLeuMetAspMetGlnThrPheLysAlaGluProProGluLysProSerAlaPheGlu 579
QY 489 CCTGCCATTGAAATGCAAAAGTCTGTTCCAAATAAAGCCTTGGAATTAAGAAATGAACAA 548
Db 580 ProAlaIleGluMetGlnLysSerValProAsnLysAlaLeuGluLeuLysAsnGluGln 599
QY 549 ACATTGAGAGCAGATCAGATGTTCCCTTCAGAAATCAAAACAAAGAGAGGTTGAAGAAAT 608
Db 600 ThrLeuArgAlaAspGlnMetPheProSerGluSerLysGlnLys***ValGluGluAsn 619
QY 609 TCTTGGGATTTGAGAGTCTCCGTGAGACTGTTTTCACAGAAGGATGTGTGTGTAACCAAG 668
Db 620 SerTrpAspSerGluSerLeuArgGluThrValSerGlnLysAspValCysValProLys 639
QY 669 GCTACACATCAAAAGAAATGATATAAATAAGTCGGAATAATAGAAATTAACCTAGCCTTA 728
Db 640 AlaThrHisGlnLysGluMetAspLysIleSerGlyLysLeuGluAspSerThrSerLeu 659
QY 729 TCAAAAATCTTGGATACAGTTTCATTCTTGTGAAAGAGCAAGGAACTTCAAAAAGATCAC 788
Db 660 SerLysIleLeuAspThrValHisSerCysGluArgAlaArgGluLeuGlnLysAspHis 679
QY 789 TGTGAACACAGCTACAGAAAATGGAACAAATGAAAAGAAAGTTTCTGTACTGAAAAAG 848
Db 680 CysGluGlnArgThrGlyLysMetGluGlnMetLysLysLysPheCysValLeuLysLys 699
QY 849 AAAGTGTGAGAGCAAGCAAAAGAAATAAATACAGTTAGAGAACCAAAAGTAATTAATGGAA 908
Db 700 LysLeuSerGluAlaLysGluIleLysSerGlnLeuGluAsnGlnLysValLysTrpGlu 719
QY 909 CAGAGCTCTGACGTGTGAGATTGACTTTAAACCAAGAGAGAGAGAGAGAAATGCC 968
Db 720 GlnGluLeuCysSerVal----- 725
QY 969 GATATATTAAATGAAAAAATTAGGAAGAATTAGGAAGAATCGNAGAGCAGCATAGGAAA 1028
Db 725 ----- 725
QY 1029 GAGTTAGAGTGAACCAACAACTTTGAACAGGCTCTCAGAAATACAGATATAGAAATTTGAAG 1088
Db 725 ----- 725
QY 1089 AGTGTAGAAAGTAATTTGAATCAGGTTTCTCAGACTCATGAAATGAAATTAATCTCTTA 1148
Db 726 -----Arg-PheLeuThrLeuMetLysMetLysIleIleSerTy 738
QY 1149 CATGAAAATTGCATGT 1164
Db 738 rMetLysIleAlaCys 743

RESULT 23
US-09-620-405B-495
; Sequence 495, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuguu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 495
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-620-405B-495
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Db 69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88
QY 1350 AAAGTTCTGATAGCTGAGAACCAATGCTCACTTCTAAATTAAGAGAAACACAGACAAA 1409
Db 89 LysValLeuLeuAlaGluAsnThrMetLeuThrSerLysLeuLysGluLysGlnAspLys 108
QY 1410 GAAATACTAGAGCAGAAATGAATCAATCACACCATCCTAGACTGGCTTCTGCTCAAGAC 1469
Db 109 GluLeuLeuGluAlaGluLeuGluSerHisProArgLeuAlaSerAlaValGlnAsp 128
QY 1470 CATGATCAAAATGTCACACAGAAAGTCAAGAACCTGCTTCCATTCACATTCGACGAGAT 1529
Db 129 HisAspGlnLeuValThrSerArgLysSerGlnGluProAlaPheHisIleAlaGlyAsp 148
QY 1530 GCTTGTTTCCAAAGAAATGAATGTGATGTGATGAGTAGTACGATATATACAAATGAGT 1589
Db 149 AlaCysLeuGluArgLysMetAsnValAspValSerSerThr-IleTyrAsnAsnGluVal 168
QY 1590 GCTCCATCAACCATCTTCTGAAGCTCAAGGAAATCCANAAGCCTAAATAATTAATCTCAA 1649
Db 168 IleuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLysIleAsnLeuAs 188
QY 1650 TTATGACGAGATGCTCTAAGAGAAATACATTAACCTAAAGGCATCTCAATATAGTGGCAGCTT 1709
Db 188 nTyrAlaGlyAspAlaLeuArgLysGlnLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88
QY 1710 AACGTTGAAACACAGTGTCAAATGAAGAACTGCTCACTTCTAAATTAAGGAAAAACAGACAAA 1409
Db 208 InArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnGluGlnAsp 228
QY 1770 ATGTGAACAAACACACACTGANCAGCAGAGTCTCTAGATCGAAATATTTTCAACTACAAA 1829
Db 228 snValAsnLysHisThrGluGlnGlnSerLeuAspGlnLysLeuPheGlnLeuGlns 248
QY 1830 GCAAAAATATGTGGCTTCAACAGCAATTAAGTATGATGTGAGTAGTAGTATATTAACATGAGT 1889
Db 248 erLysAsnMetTrpLeuGlnGlnGlnLeuValHisAlaHis-LysLysAlaAspAsnLys 267
QY 1890 AGCAAGATAACAAATTTGATNTTCTTCTGAGAGGAAATGNC-CATCATCTTCTTAAAA 1948
Db 268 SerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHisLeuLeuLys 287
QY 1949 GAGAAAAATGAGGAGATATTATTAACATTAACATTAACATTAACATTAACATTAACATTA 2008
Db 288 GluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIleTyrGlnTyr 307
QY 2009 TCGAAAAAANAANAANA 2027
Db 307 rGluLysGluLysAlaGlu 313

RESULT 28
US-09-433-826B-176
; Sequence 176, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqi
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433,826B
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 176
; LENGTH: 317
; TYPE: PRN
; ORGANISM: Homo sapien
US-09-433-826B-176
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Alignment Scores:
Pred. No.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 4 Gaps: 0

US-09-602-362B-15 (1-2030) x US-09-433-826B-176 (1-317)
QY 1110 CAGTTTCTCACACTCATGAAATGAAATATATCTTCTTACATGAAATTCATGTTGAAA 1169
Db 9 GluValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCysMetLeuLys 28
QY 1170 AAGGAAATTCCTCATCTGATAAAGTGAATAGCACACTGAAACACCAATACCCAGGAAAG 1229
Db 29 LysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyrGlnGluLys 48
QY 1230 GAAATATAATCTTTTGAGGACATTAAAGATTTTAAAGAAAAAGAAATGCTGAACTTCAGATG 1289
Db 49 GluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGluLeuGlnMet 68
QY 1290 ACCCTRAAACTGAAGAGGAATCATTAACCTAAAGGCATCTCAATATAGTGGCAGCTT 1349
Db 69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88
QY 1350 AAAGTTCTGATAGCTGAGAAACACAAATGCTCACTTCTAAATTAAGGAAAAACAGACAAA 1409
Db 89 LysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLysGlnAspLys 108
QY 1410 GAAATACTAGAGGAGAAATTAATGATCACCATCTCTAGACTGGCTTCTGCTGACAGAC 1469
Db 109 GluLeuLeuGluAlaGluIleGluSerHisProArgLeuAlaSerAlaValGlnAsp 128
QY 1470 CATCATCAAAATTTGACATCAAGAAAAAGTCAAGAACTGCTTTCACATTGACAGAGAT 1529
Db 129 HisAspGlnLeuValThrSerArgLysSerGlnGluProAlaPheHisIleAlaGlyAsp 148
QY 1530 GCTTGTTTCCAAAGAAATGAATGTGATGTGAGTAGTAGTATATTAACATGAGT 1589
Db 149 AlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrAsnAsnGluVal 168
QY 1590 GCTCCATCAACCATCTTCTGAAGCTCAAGGAAATCCANAAGCCTAAATAATTAATCTCAA 1649
Db 168 IleuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIleAsnLeuAs 188
QY 1650 TTATGACGAGATGCTCTAAGAGAAATACATTAAGTGGTTTCAGGAAACATGCAAGAGAC 1709
Db 188 nTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaGlnArgAspG 208
QY 1710 AACGTTGAAACACAGTGTCAAATGAAGAACTGAAACATGTTTCAANCGAACACAGATN 1769
Db 208 InArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnGluGlnAsp 228
QY 1770 ATGTGAACAAACACACACTGANCAGCAGAGTCTCTAGATCGAAATATTTTCAACTACAAA 1829
Db 228 snValAsnLysHisThrGluGlnGlnSerLeuAspGlnLysLeuPheGlnLeuGlns 248
QY 1830 GCAAAAATATGTGGCTTCAACAGCAATTAAGTATGATGTGAGTAGTAGTATATTAACATGAGT 1889
Db 248 erLysAsnMetTrpLeuGlnGlnGlnLeuValHisAlaHis-LysLysAlaAspAsnLys 267
QY 1890 AGCAAGATAACAAATTTGATNTTCTTCTGAGAGGAAATGNC-CATCATCTTCTTAAAA 1948
Db 268 SerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHisLeuLeuLys 287
QY 1949 GAGAAAAATGAGGAGATATTATTAACATTAACATTAACATTAACATTAACATTAACATTA 2008
Db 288 GluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIleTyrGlnTyr 307
QY 2009 TCGAAAAAANAANAANA 2027
Db 307 rGluLysGluLysAlaGlu 313
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Db      188 nTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaGlnArgAspG 208
QY      1710 AACCTGAAACACAGTCTCAAAATGAAGAGCTGAACACATGTTNTCAAACGAAACAGATN 1769
Db      208 lnArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnGluGlnAspA 228
QY      1770 ATGTGAACAAACACACACAGCAGAGCTCTAGATCAGAAATATTATTTCAACTCAAA 1829
Db      228 snValAsnLysHisThrGluGlnGlnSerLeuAspGlnLysLeuPheGlnLeuGlnS 248
QY      1830 GCAAAAATATGTGCTTCAACACAGCAATTAGTTTCATGCACATAANGAAAGCTGACACAAA 1889
Db      248 erLysAsnMetTyrLeuGlnGlnGlnLeuValHisAlaHis-LysLysAlaAspAsnLys 267
QY      1890 AGCAAGATAACAATTGATNTTCATTCTTTCAGAGGGAATGCGN-CATCATCTTCTTAAA 1948
Db      268 SerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisHisLeuLeuLys 287
QY      1949 GAGAAAAATGAGGAGATATTATTATACNATAACCAATTTAAAAAACCCGTATATTTCATA 2008
Db      288 GluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIleTyrGlnTy 307
QY      2009 TGGAAAAAANAANAANA 2027
Db      307 rGluLysGluLysAlaGlu 313

RESULT 30
US-09-285-480-176
; Sequence 176, Application US/09285480
; Patent No. 8590076
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jjiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 176
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-285-480-176

Alignment Scores:
Pred. No.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-604-287A-176 (1-317)
QY      1110 CAGTTTCTCACACTCATGAAATGAAATATCTCTTACATGAAATTCATGTTGAAA 1169
Db      9 GluValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCysMetLeuLys 28
QY      1170 AAGGAAATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1229
Db      29 LysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyrGlnGluLys 48
QY      1230 GAAATAAATCTCTTGGAGCATTAAGATTTTAAAAAGAAAGAAATGCTGAATTCAGATG 1289
Db      49 GluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGluLeuGlnMet 68
QY      1290 ACCCTAAACTGAAAGAGGAATCATTAACATAAAGGCATCTCAATATAGTGGCAGCTT 1349
Db      69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88

Alignment Scores:
Pred. No.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-285-480-176 (1-317)
QY      1110 CAGTTTCTCACACTCATGAAATGAAATATCTCTTACATGAAATTCATGTTGAAA 1169
Db      9 GluValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCysMetLeuLys 28
QY      1170 AAGGAAATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1229
Db      29 LysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyrGlnGluLys 48
QY      1230 GAAATAAATCTCTTGGAGCATTAAGATTTTAAAAAGAAAGAAATGCTGAATTCAGATG 1289
Db      49 GluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGluLeuGlnMet 68
QY      1290 ACCCTAAACTGAAAGAGGAATCATTAACATAAAGGCATCTCAATATAGTGGCAGCTT 1349
Db      69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88

Alignment Scores:
Pred. No.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 4 Gaps: 0

US-09-604-287A-176
; Sequence 176, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jjiang, Yuqui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 176
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-604-287A-176

Alignment Scores:
Pred. No.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 4 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-604-287A-176 (1-317)
QY      1110 CAGTTTCTCACACTCATGAAATGAAATATCTCTTACATGAAATTCATGTTGAAA 1169
Db      9 GluValSerHisThrHisGluAsnGluAsnTyrLeuLeuHisGluAsnCysMetLeuLys 28
QY      1170 AAGGAAATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1229
Db      29 LysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyrGlnGluLys 48
QY      1230 GAAATAAATCTCTTGGAGCATTAAGATTTTAAAAAGAAAGAAATGCTGAATTCAGATG 1289
Db      49 GluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGluLeuGlnMet 68
QY      1290 ACCCTAAACTGAAAGAGGAATCATTAACATAAAGGCATCTCAATATAGTGGCAGCTT 1349
Db      69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88
QY      1350 AAGTTTCTGATAGTCAGAACACAATGCTCACTTCTTAAATTTGAAGGAAACAAACAGACAAA 1409
Db      89 LysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLysGlnAspLys 108
QY      1410 GAATACTAGACGACGAGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAA 1469
Db      109 GluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAlaValGlnAsp 128
QY      1470 CATGATCAAAATTCGACATCAAGAAAGTCAAGAACCTGCTTTTCCACATTCAGGAGAT 1529
Db      129 HisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIleAlaGlyAsp 148
QY      1530 GCTTGTTCGAAAGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAA 1589
Db      149 AlaCysLeuGlnArgLysMetAsnValAspValSerSerThr-IleTyrAsnAsnGluVa 168
QY      1590 GCTCCATCAACACTTCTGAACTCAAGAAAGTCAAGAACCTGAAAGAAATTCATCTCAA 1649
Db      168 IleHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIleAsnLeuAs 188
QY      1650 TTATGAGAGAGATGCTCTAGAGAAATATCATTTGTTTTCAGGAAACATGACAAAGAGACC 1709
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QY 1350 RAAGTTCTGATAGCTGAGACAAATGCTCACTTCTAATTCAGGAAACACACAAA 1409
Db 89 LysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLysGlnAspLys 108
QY 1410 GAAATCTAGAGGAGAAATTCAGATCACCACCACTCTAGACTGGCTTCTGCTGTAAGAAC 1469
Db 109 GluIleLeuGluAlaGluIleGluSerHisProArgLeuAlaSerAlaValGlnAsp 128
QY 1470 CATGATCAAAATGTCATCAGACAAAGTCAAGAACCTGCTTCCACATTCGAGGAGAT 1529
Db 129 HisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIleAlaGlyAsp 148
QY 1530 GCTTCTGTCGAAAGAAATGATCTGATGCTAGTACGATATATACCAATGAGCT 1589
Db 149 AlaCysLeuGlnArgLysMetAsnValAspValSerThr-IleTyrAsnAsnGluVal 168
QY 1590 GTCCATCAACCACTTCTGAAAGTCAAGGAAATCCANAGCCCTAAATAATCTCAA 1649
Db 168 lLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIleAsnLeuAs 188
QY 1650 TTATGCAGGAGATGCTCTAAGAGAAATACATTTGCTTTCAGGAACATGCACAAAGAGACC 1709
Db 188 nIlyrAlaGlyAspAlaLeuArgLysGlnThrLeuValSer-GluHisAlaGlnArgAspG 208
QY 1710 AACGTGAACACAGTGTCAAATGAAGAGAGCTGAACACATGTNTCAAANCGAACACAAA 1769
Db 208 lInArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnGluGlnAspA 228
QY 1770 ATGTGAACAAACACATGNCAGCAGGAGTCTTAGATCAGNATTTATTCACACTACAAA 1829
Db 228 snValAsnLysHisThrGluGlnGlnGluSerLeuAspGlnLysLeuPheGlnLeuGlns 248
QY 1830 GCAAAATATGTGGTCTCAACAGCAATAGTTTCATGCGACGAAATGCN-CATCATCTTCTAAA 1889
Db 248 SerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisLeuLeuLys 287
QY 1949 GAGAAATATGAGGAGATATTNTATTACNATAACCATTTAAACCCGCTATATTCAATA 2008
Db 288 GluLysAsnGluGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIleTyrGlnTy 307
QY 2009 TCGAAAAAANAANAANAANA 2027
Db 307 rGluLysGluLysAlaGlu 313
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RESULT 31

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US-09-834-759-176
; Sequence 176, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 176
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-834-759-176
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Alignment Scores:
Pred. NO.: 5.38e-124 Length: 317
Score: 1397.00 Matches: 288
Percent Similarity: 94.50% Conservative: 4
Best Local Similarity: 93.20% Mismatches: 13
Query Match: 41.05% Indels: 5
DB: 0 Gaps: 0

US-09-602-362E-15 (1-2030) x US-09-834-759-176 (1-317)
QY 1110 CAGGTTTCTCACACTCATGAAAAATGAAAAATTAATCTCTTACATGAAAAATTCATGTTGAAA 1169
Db 9 GluValSerHisThrHisGluAsnGluAsnTyr-LeuLeuHisGluAsnCysMetLeuLys 28
QY 1170 AAGGAATTCCTGATGCTTAAACTGGAATAGCCACACTGAAACACCAATACCAAGGAAAAG 1229
Db 29 LysGluIleAlaMetLeuLysLeuGluIleAlaThrLeuLysHisGlnTyrGlnGluLys 48
QY 1230 GAAAAATAAATACTTTGAGGACATTAAAGATTTTAAAGAAAAAGAAATGCTGAACCTTCAGATG 1289
Db 49 GluAsnLysTyrPheGluAspIleLysIleLeuLysGluLysAsnAlaGluLeuGlnMet 68
QY 1290 ACCCTAAACTGAAAGAGGAATCATTAACCTAAAGGCGCATCTCAATATAGTGGCAGCTT 1349
Db 69 ThrLeuLysLeuLysGluGluSerLeuThrLysArgAlaSerGlnTyrSerGlyGlnLeu 88
QY 1350 AAAGTCTGATAGCTGAGAACACAACTGCTCACTTCTAAATTTGAAGGAAAAACAAAGACAAA 1409
Db 89 LysValLeuIleAlaGluAsnThrMetLeuThrSerLysLeuLysGluLysGlnAspLys 108
QY 1410 GAAATCTAGAGGCGAAATGAAATCACACCATCTAGACTGCTTCCACATGCGAGGAGAT 1469
Db 109 GluIleLeuGluAlaGluIleGluSerHisHisProArgLeuAlaSerAlaValGlnAsp 128
QY 1470 CATGATCAAAATGTCATCAGACATCAAGAAAAGTCAGAACCTGCTTCCACATGCGAGGAGAT 1529
Db 129 HisAspGlnIleValThrSerArgLysSerGlnGluProAlaPheHisIleAlaGlyAsp 148
QY 1530 GCTTGTTCGAAAGAAATGAAATGTTGATGTGAGTAGTACCGATATATAACAAATGAGGT 1589
Db 149 AlaCysLeuGlnArgLysMetAsnValAspValSerThr-IleTyrAsnAsnGluVal 168
QY 1590 GCTCCATCAACCACTTCTGAAAGTCAAGGAAATCCANAGCCCTAAATAATTCATCTCAA 1649
Db 168 lLeuHisGlnProLeuSerGluAlaGlnArgLysSerLysSerLeuLysIleAsnLeuAs 188
QY 1650 TTATGCAGGAGATGCTCTAAGAGAAATACATTTGGTTCAGGAACATGCACAAAGAGACC 1709
Db 188 nTyrAlaGlyAspAlaLeuArgGluAsnThrLeuValSer-GluHisAlaGlnArgAspG 208
QY 1710 AAGGTGAACACAGTGTCAAATGAAGAGAGCTGAACACATGTNTCAAANCGAACACAGATN 1769
Db 208 lInArgGluThrGlnCysGlnMetLysGluAlaGluHisMetTyrGlnAsnGluGlnAspA 228
QY 1770 ATGTGAACAAACACACTGANCAGCAGGAGTCTTAGATCAGAAATTAATTCACATCAAAA 1829
Db 228 snValAsnLysHisThrGluGlnGlnGluSerLeuAspGlnLysLeuPheGlnLeuGlns 248
QY 1830 GCAAAATATGTGGTCTCAACAGCAATAGTTTCATGCGACGAAATGCN-AAGAGCTGTAAGAAA 1889
Db 248 erLysAsnMetTyrPLeuGlnGlnGlnLeuValHisAlaHis-LysLysAlaAspAsnLys 267
QY 1890 AGCAAGATACAAATTCATTTCTTCTGAGAGAAATGCN-CATCATCTTCTTAAAA 1948
Db 268 SerLysIleThrIleAspIleHisPheLeuGluArgLysMetGlnHisLeuLeuLys 287
QY 1949 GAGAAAAATCAGGAGATATTNTATTACNATAACCATTTAAACCCGCTATATTCAATA 2008
Db 288 GluLysAsnGluIlePheAsnTyrAsnAsnHisLeuLysAsn-ArgIleTyrGlnTy 307
QY 2009 TCGAAAAAANAANAANAANA 2027
Db 307 rGluLysGluLysAlaGlu 313
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